



AMP NETCONNECT

2010 Product Catalog





25 Year System Performance Coverage*

We are confident that your AMP NETCONNECT cabling system will keep performing to current TIA/EIA industry standards. If the registered system ever fails to meet those standards within 25 years of the date of installation, we'll provide the reasonable parts and labor to replace or repair the AMP NETCONNECT product.



25 Year Component Coverage*

Tyco Electronics also offers a 25 Year Component Warranty to protect individual AMP NETCONNECT cabling system components. If a component fails within 25 years of the date of installation, we'll provide the reasonable parts to replace or repair the registered AMP NETCONNECT product.



25 Year AMPTRAC System Performance Coverage*

The AMPTRAC System provides the same 25-year electrical and optical data-carrying performance warranty as standard AMP NETCONNECT cabling systems. The AMPTRAC components provide the following coverage:

- AMPTRAC Patch panels and I/O cables – 25 years
- AMPTRAC Patch Cords – 25 years
- AMPTRAC Sensor Strips – 5 years
- AMPTRAC Analyzers – 1 year (optional 3-year extended warranty available)
- AMPTRAC IM Software – 1 year Service Level Agreement

Power Distribution Product Coverage*

Tyco Electronics warrants that all AMPINERGY power distribution system and undercarpet cabling system products within this catalog will be delivered free from defects in material and workmanship or Tyco Electronics will repair or replace the product.

AMPINERGY Power Distribution System Warranty:

90-day for the AMPINERGY power components, providing they are installed per the applicable instruction sheet and the overall system is installed in accordance with the AMP NETCONNECT AMPINERGY Layout and Planning Manual.

Undercarpet Power Cabling System Warranty:

90-day for the Undercarpet power components, providing they are installed per the applicable instruction sheet and the overall system is installed in accordance with the AMP NETCONNECT Undercarpet Cabling Planning and Installation Manual.

Undercarpet Communications Cabling System Warranty:

25-years system performance provided the Undercarpet communications cabling system is installed by a Tyco Electronics authorized NETCONNECT Design & Installation (ND&I) contractor or a 25-year component warranty if installed by a AMP NETCONNECT registered contractor.

It's Standard Equipment

This coverage is automatically part of the package when*:

- AMP NETCONNECT products are specified end-to-end
- A Tyco Electronics-authorized NETCONNECT Design & Installation (ND&I) contractor registers the network project with Tyco Electronics
- That ND&I performs the actual installation in accordance with Tyco Electronics requirements

Who's Covered

Unlike most systems suppliers, Tyco Electronics provides warranty coverage directly to the end user. Many suppliers provide coverage to the installers, who then provide coverage to the customer. But with Tyco Electronics warranties, there are no middlemen. The warranties are between you and Tyco Electronics.

For more information, please visit: <http://www.tycoelectronics.com/aboutus/pdf/tc.pdf>

Or call: 1-800-553-0938

Outside the U.S.: Please contact your local AMP NETCONNECT product sales office.

People & Products to Answer the Cabling Challenge.

Cabling a retail store, casino or office building can be complex. Yet the solution for productive connectivity and cable management can be as simple as talking to the right people - The AMP NETCONNECT business unit of Tyco Electronics.

We bring in-depth technical knowledge and expertise from decades of experience. Innovative technologies from ongoing R&D. And quality products for every power, data, voice and video networking need. One of the broadest lines in the industry, in fact.

Additionally, it's what we do to answer the challenge: develop and deliver integrated, made-to-order solutions that optimize network performance, increase productivity and produce more immediate return-on-investment.

And it's not just providing technology. It's making sure solutions are efficiently and effectively installed: working with distributors and customers so products are delivered when and where you need them. And maintaining a global network of certified installation contractors.

It all means, simply, that AMP NETCONNECT cabling systems provide the answers you're looking for: the whole solution for any cabling challenge. From the ground up.

*Some conditions may apply. AMP NETCONNECT Home Net-Works Systems qualify for a 25 year component warranty only. For more information, please visit www.ampnetconnect.com or call 1-800-553-0938. Outside the U.S., please contact your local AMP NETCONNECT product sales office.



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Chapter Summary

At Tyco Electronics, we've known for years that shielded cabling offers superior noise immunity at higher frequencies where applications like 10 gigabit Ethernet reside, without hampering performance. That's why shielded technology is the only copper technology with proposals for supporting next-generation applications beyond 10 gig.

Through advancements in connector technology and system design, the AMP NETCONNECT XG Category 6A shielded solution now offers easier 10-gig installation without the restrictions of unshielded cabling. For starters, our XG Category 6A solution allows you to mix cabling with other types of copper media and neatly arrange cabling bundles without worrying about performance. Plus, there's no need for time-consuming Alien Crosstalk testing. And you get the easiest terminating shielded jack on the market, which means your 10-gig networks can be up and running faster than ever.

Backed by our 25-year performance warranty*, the AMP NETCONNECT XG shielded cabling solution features modular jacks, patch panels and shielded cable and assemblies that offer superior performance and cost advantages over unshielded solutions. Our fully-compliant XG solution offers fast, easy deployment with bonding and grounding that occurs naturally through normal installation practices.

With superior noise immunity to eliminate Alien Crosstalk and RFI/EMI, the AMP NETCONNECT XG Category 6A shielded system offers performance above 500 MHz, with plenty of margin needed for advanced 10 gigabit transmission and future applications.

Section Facts

- Exceeds ANSI/TIA 568-C.2 Category 6A
- Meets IEEE 802.3an 10GBASE-T and ISO/IEC 11801 Class EA on 100m channels
- Superior noise immunity for superior performance and headroom
- Better heat dissipation for power over Ethernet
- Faster, more familiar installation
- Consistent, precise terminations
- Fastest termination time in the industry
- Enhanced cable management and density
- Automatic bonding and grounding design
- Please call customer service at 1-800-553-0938 for quotes on custom assemblies
- Tyco Electronics offers one of the broadest assortments of connectors in the world and is continually introducing new products. If you don't see what you need in this catalog, please contact Tyco Electronics Product Information Center at 1-800-522-6752

*Some conditions may apply. AMP NETCONNECT Home Net-Works Systems qualify for a 25 year component warranty only. For more information, please visit www.ampnetconnect.com or call 1-800-553-0938. Outside the U.S., please contact your local AMP NETCONNECT product sales office.

Twisted Pair Cable Information

01

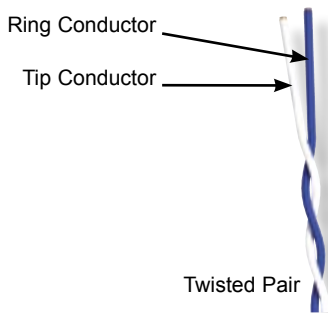
Cable Packaging Reference



WR = Wooden Reels

Note: Unless otherwise specified, all lengths are 1000 feet (305 meters). Other lengths and colors available. Call for details. Package types are listed in each chart.

4-Pair Conductor Color Code

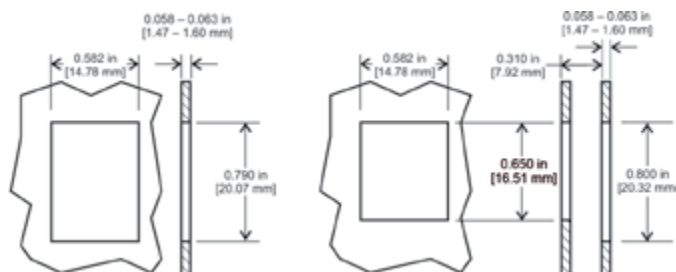


Pair		Jacket Color
1	Tip	White
	Ring	Blue
2	Tip	White
	Ring	Orange
3	Tip	White
	Ring	Green
4	Tip	White
	Ring	Brown

Twisted Pair Cable Temperatures

Category	Condition	Riser/Plenum
Cat 6A	Storage	-4 – 140°F (-20 – 60°C)
	Operating	-4 – 140°F (-20 – 60°C)
	Installation	40 – 140°F (4 – 60°C)

Suggested Modular Jack Cutouts



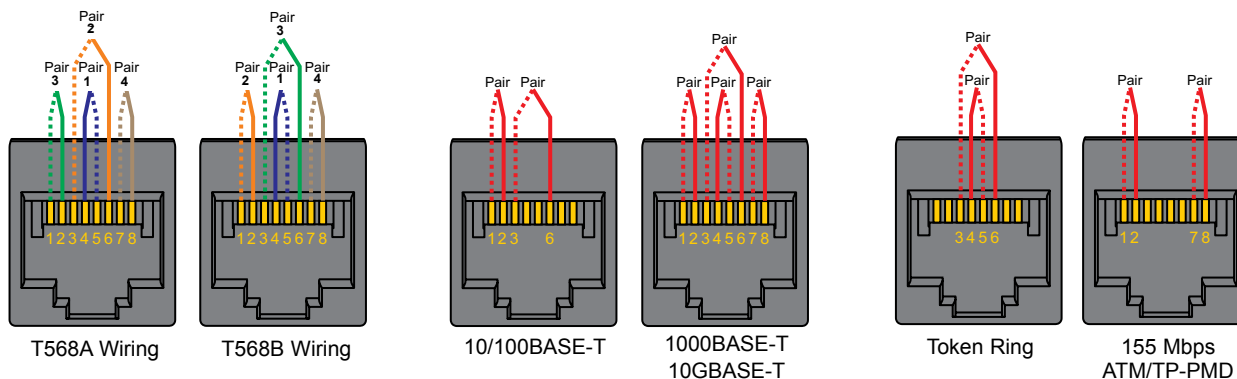
Suggested Single Panel Cutout

Suggested Flush Mount Panel Application Cutout

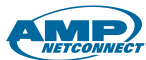
AMP NETCONNECT Modular Jack Technical Reference

Modular Jack Mating Cycles	110 Contacts Terminations	Modular Jack Pull Force	Voltage	Operating Temperature	Approvals
750	200	20 lbs (89 N)	150 VAC max.	-40° — 70°C (-40° — 158°F)	UL Listed File Number: E81956

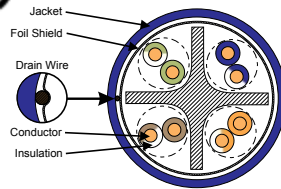
Application Wiring Diagrams for Modular Jacks



XG Category 6A F/UTP Cabling System



XG620 Series, Category 6A F/UTP (ScTP) Cable



- Meets or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class E_A up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- Independently tested by Intertek ETL SEMKO third party testing services
- Meets or exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet
- 23 AWG solid conductors
- Lead-free (no heavy metals)

01

UL/NEC Ratings	Pair Count	Package	Part Number				Weight lbs/mft	Vp (%nom)	Dimensions (in)	
			White	Gray	Blue	Yellow			Dielectric	Outside
CMR	4	WR	4-1499389-1	4-1499389-3	4-1499389-5	4-1499389-7	41.0	72	0.044	0.300
CMP	4	WR	4-1499416-1	4-1499416-3	4-1499416-5	4-1499416-7	41.7	72	0.044	0.300

XG Category 6A AMP-TWIST Shielded Modular Jacks



- Meets or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class E_A up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- Meets or exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet
- Easy installation
- Termination time: about 90 seconds (using AMP NETCONNECT SL Series Termination Tool, without Lacing Fixture – 1725150-3, see Chapter 22)
- Integrated strain relief and shield clamp
- Integrated dust cover option
- Re-usable
- Universal wiring label permits wiring to T568A or T568B
- 8-Position RJ45 Modular Jacks for 1, 2, 3, and 4-Pair applications
- RoHS compliant
- For unloaded patch panels see Chapter 15

Description	Wiring Pattern		Figure	Part Number
Rear Entry	T568A/T568B	without Dust Cover	A	1711342-2
		with Clear Dust Cover		1711160-2
Side Entry	T568A/T568B	without Dust Cover	B	1711343-2
		with Clear Dust Cover		1711295-2

Colored Dust Covers for XG Cat 6A AMP-TWIST Modular Jacks With Dust Covers



- For use with AMP-TWIST modular jacks 1711160-2 and 1711295-2 only
- Replaces existing clear dust cover on 1711160-2 and 1711295-2 (jack is not included with colored dust cover)
- 8 color choices
- Provides easier port identification
- Interchangeable
- No special tooling required
- Packaged 50/bag
- Application Spec: 114-93008
- RoHS compliant

Black	White	Violet	Orange	Blue	Red	Green	Yellow
1-1711511-2	1-1711511-3	1-1711511-4	1-1711511-5	1-1711511-6	1-1711511-7	1-1711511-8	1-1711511-9

XG Category 6A F/UTP Slim Line Patch Cable Assemblies

01



- Meets or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class E_A up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- Meets or exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet
- Non-plenum (CM rated)
- 4-Pair stranded F/UTP conductors
- Universal wiring (T568A/T568B)
- Lead-Free (no heavy metals)
- Jacket colors shown in the table are approximate

Length	Black	Gray	Blue	Green	Red	White	Yellow	Orange	Violet
2 ft [0.61 m]	1933880-2	1933881-2	1933882-2	1933883-2	1933884-2	1933885-2	1933886-2	1933887-2	1933888-2
3 ft [0.91 m]	1933880-3	1933881-3	1933882-3	1933883-3	1933884-3	1933885-3	1933886-3	1933887-3	1933888-3
4 ft [1.22 m]	1933880-4	1933881-4	1933882-4	1933883-4	1933884-4	1933885-4	1933886-4	1933887-4	1933888-4
5 ft [1.52 m]	1933880-5	1933881-5	1933882-5	1933883-5	1933884-5	1933885-5	1933886-5	1933887-5	1933888-5
6 ft [1.83 m]	1933880-6	1933881-6	1933882-6	1933883-6	1933884-6	1933885-6	1933886-6	1933887-6	1933888-6
7 ft [2.13 m]	1933880-7	1933881-7	1933882-7	1933883-7	1933884-7	1933885-7	1933886-7	1933887-7	1933888-7
8 ft [2.44 m]	1933880-8	1933881-8	1933882-8	1933883-8	1933884-8	1933885-8	1933886-8	1933887-8	1933888-8
9 ft [2.74 m]	1933880-9	1933881-9	1933882-9	1933883-9	1933884-9	1933885-9	1933886-9	1933887-9	1933888-9
10 ft [3.05 m]	1-1933880-0	1-1933881-0	1-1933882-0	1-1933883-0	1-1933884-0	1-1933885-0	1-1933886-0	1-1933887-0	1-1933888-0
12 ft [3.66 m]	1-1933880-2	1-1933881-2	1-1933882-2	1-1933883-2	1-1933884-2	1-1933885-2	1-1933886-2	1-1933887-2	1-1933888-2
14 ft [4.27 m]	1-1933880-4	1-1933881-4	1-1933882-4	1-1933883-4	1-1933884-4	1-1933885-4	1-1933886-4	1-1933887-4	1-1933888-4
15 ft [4.57 m]	1-1933880-5	1-1933881-5	1-1933882-5	1-1933883-5	1-1933884-5	1-1933885-5	1-1933886-5	1-1933887-5	1-1933888-5
16 ft [4.88 m]	1-1933880-6	1-1933881-6	1-1933882-6	1-1933883-6	1-1933884-6	1-1933885-6	1-1933886-6	1-1933887-6	1-1933888-6
20 ft [6.10 m]	2-1933880-0	2-1933881-0	2-1933882-0	2-1933883-0	2-1933884-0	2-1933885-0	2-1933886-0	2-1933887-0	2-1933888-0
25 ft [7.62 m]	2-1933880-5	2-1933881-5	2-1933882-5	2-1933883-5	2-1933884-5	2-1933885-5	2-1933886-5	2-1933887-5	2-1933888-5
30 ft [9.14 m]	3-1933880-0	3-1933881-0	3-1933882-0	3-1933883-0	3-1933884-0	3-1933885-0	3-1933886-0	3-1933887-0	3-1933888-0
40 ft [12.19 m]	4-1933880-0	4-1933881-0	4-1933882-0	4-1933883-0	4-1933884-0	4-1933885-0	4-1933886-0	4-1933887-0	4-1933888-0
50 ft [15.24 m]	5-1933880-0	5-1933881-0	5-1933882-0	5-1933883-0	5-1933884-0	5-1933885-0	5-1933886-0	5-1933887-0	5-1933888-0

XG Category 6A AMP-TWIST Shielded Patch Panels



- Meets or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class E_A up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- Meets or exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet
- Shielded installation made simple with jacks
- Ports may be individually replaced
- Packaged unloaded with jacks bagged separately for termination with SL Series jack termination tool, see Chapter 22
- Available in straight and angled versions
- Labels and label covers included
- Accommodates icons (sold separately)
- Integrated bonding bar makes bonding simple and requires no extra steps
- For multimedia (no included connectivity) patch panels, see Chapter 15

Footprint	Port Count	Height	Width	Figure	Part Number
Standard	24	1U (1.75")	19.0"	A	1933319-2
	48	2U (3.50")	19.0"	B	1933320-2
Angled	24	1U (1.75")	19.0"	C	1933321-2
	48	2U (3.50")	19.0"	D	1933322-2



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Section Facts

- Components meet or exceed all ANSI/TIA and ISO specifications
- Cables are Listed for safety (CMR/CMP)
- Variety of colors and packaging available
- A complete line of cable assemblies for any communications scenario
- Factory-terminated and tested cable assemblies manufactured using quality AMP NETCONNECT cables and connectors
- Tyco Electronics offers one of the broadest assortments of connectors and cable assemblies in the world and is continually introducing new products. If you don't see what you need in this catalog, please contact Tyco Electronics Product Information Center at 1-800-522-6752

Twisted Pair Cable Information

02



WR = Wooden Reels



RB = Reel-in-a-Box



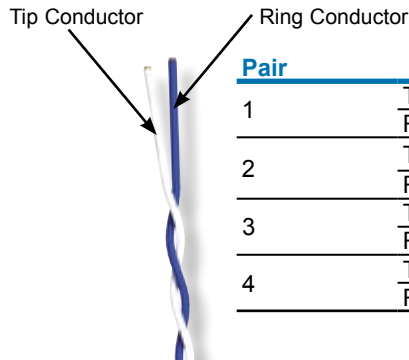
PB = Pull Box

Unless otherwise specified, all lengths are 1000 feet (305 meters). Other lengths and colors available, call for details. Package types are listed in each chart.

Twisted Pair Cable Temperature

Category	Condition	Riser/Plenum
Cat 6, 6E	Storage	-4 — 140°F (-20 — 60°C)
	Operating	-4 — 140°F (-20 — 60°C)
	Installation	40 — 140°F (4 — 60°C)

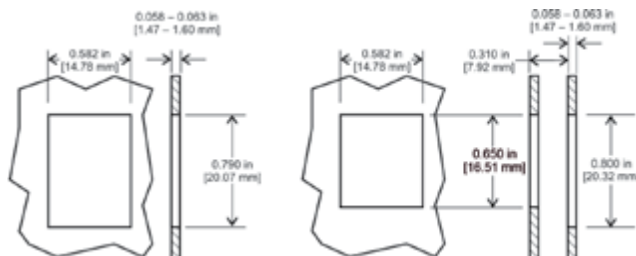
4-Pair Conductor Color Code



Pair	Tip	Ring	Jacket Color
1	White	Blue	Blue
2	White	Orange	Orange
3	White	Green	Green
4	White	Brown	Brown

Twisted Pair

Suggested Modular Jack Cutouts



Suggested Single Panel Cutout

Suggested Flush Mount Panel Application Cutout

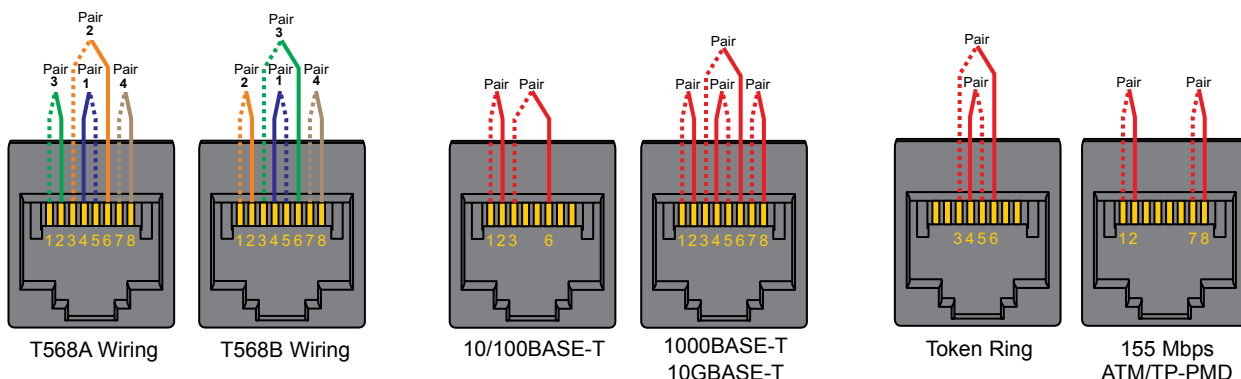
Die Set/Tool to Modular Plug Cross-Reference

Cat 6 Modular Plugs	Modular Plug Tool Kits	
	790163-1	790163-5
1479185	—	X
1479184	—	X
1375202	X	—
1375204	X	—

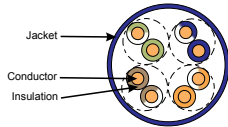
AMP NETCONNECT Modular Jack Technical Reference

Modular Jack Mating Cycles	110 Contacts Terminations	Modular Jack Pull Force	Voltage	Operating Temperature	Approvals
750	200	20 lbs (89 N)	150 VAC max.	-40° — 70°C (-40° — 158°F)	UL Listed File Number: E81956

Application Wiring Diagrams for Modular Jacks



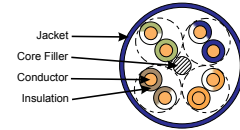
610 Series, Category 6 UTP Cable



- Performance characterized to 250 MHz
- Meets ANSI/TIA-568-C.2 Category 6 and ISO Class E 11801: 2002 specifications
- Intertek ETL SEMKO Listed (CMR/CMP)
- Exceeds all requirements for Gigabit Ethernet
- Lead-free (no heavy metals)
- 23 AWG, solid conductors

UL/NEC Ratings	Pair Count	Package	Part Numbers				Weight lbs/kft	Vp (%nom)	Dimensions (in)	
			White	Gray	Blue	Yellow			Dielectric	Outside
CMP	4	RB	1933047-2	1933047-4	1933047-6	1933047-8	24	74	0.040	0.206
		WR	1933047-1	1933047-3	1933047-5	1933047-7				

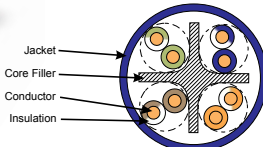
620 Series, Category 6 UTP Cable



- Performance characterized to 600 MHz
- 3 dB NEXT performance above Category 6
- Meets or exceeds ANSI/TIA-568-C.2 Category 6 and ISO Class E 11801: 2002 specifications
- Intertek ETL SEMKO Listed (CMR/CMP)
- Independently verified by Intertek ETL SEMKO testing services
- Exceeds all requirements for Gigabit Ethernet
- Lead-free (no heavy metals)
- 23 AWG, solid conductors

UL/NEC Ratings	Pair Count	Package	Part Numbers				Weight lbs/kft	Vp (%nom)	Dimensions (in)	
			White	Gray	Blue	Yellow			Dielectric	Outside
CMR	4	RB	219560-2	219560-4	219560-6	219560-8	26	70	0.042	0.230
		WR	219560-1	219560-3	219560-5	219560-7				
CMP	4	RB	219567-2	219567-4	219567-6	219567-8	24	74	0.040	0.206
		WR	219567-1	219567-3	219567-5	219567-7				

630 Series, Category 6E UTP Cable



- Performance characterized to 600 MHz
- 12 dB NEXT performance above Category 6
- Meets or exceeds ANSI/TIA-568-C.2 Category 6 and ISO 11801: 2002 Class E specifications
- Intertek ETL SEMKO Listed (CMR/CMP)
- Independently verified by Intertek ETL SEMKO testing services
- Exceeds all requirements for Gigabit Ethernet
- Lead-free (no heavy metals)
- 23 AWG, solid conductors

UL/NEC Ratings	Pair Count	Package	Part Numbers				Weight lbs/kft	Vp (%nom)	Dimensions (in)	
			White	Gray	Blue	Yellow			Dielectric	Outside
CMR	4	RB	1499038-2	1499038-4	1499038-6	1499038-8	34	70	0.042	0.260
		WR	1499038-1	1499038-3	1499038-5	1499038-7				
CMP	4	RB	1499033-2	1499033-4	1499033-6	1499033-8	35	74	0.040	0.245
		WR	1499033-1	1499033-3	1499033-5	1499033-7				

SL Series Category 6 Modular Jacks

02



- Thin profile improves outlet density
- Modular Jacks available with integral dust covers
- 180° or 90° cable dress for easy termination
- Universal wiring label permits wiring to T568A or T568B
- Meets or exceeds all TIA and ISO component performance requirements
- Bend-limiting strain relief included with unshielded jacks
- UL Listed: E81956
- 8-Position RJ45 Modular Jacks for 1, 2, 3 and 4-Pair applications
- Can be terminated with either SL Series Modular Jack Termination Tool (1725150-1 or standard 110 punch-down tools, see Chapter 22
- RoHS compliant
- Bulk packaging is 25 jacks per bag, 4 bags per carton
- Colors in table are approximate
- For unloaded patch panels see Chapter 15

Description	Shielding	Cable Entry	Jack Color	Without Dust Cover	With Dust Cover	Without Dust Cover Bulk Packaged
SL Series Category 6 Modular Jacks	Unshielded	90° (Side) or 180° (Rear)	Almond	1375055-1	1375187-1	2-1375055-1
			Black	1375055-2	1375187-2	2-1375055-2
			White	1375055-3	1375187-3	2-1375055-3
			Gray	1375055-4	1375187-4	2-1375055-4
			Orange	1375055-5	1375187-5	2-1375055-5
			Blue	1375055-6	1375187-6	2-1375055-6
			Red	1375055-7	1375187-7	2-1375055-7
			Yellow	1375055-8	1375187-8	2-1375055-8
			Green	1375055-9	1375187-9	2-1375055-9
			Violet	1-1375055-0	1-1375187-0	3-1375055-0
			Electrical Ivory	1-1375055-1	1-1375187-1	3-1375055-1
			Alpine White	1-1375055-3	1-1375187-3	3-1375055-3
	Shielded	180° (Rear)	Black	1375188-1*	—	—
		90° (Side)	Black	1479552-1*	—	—

*Note: Shielded jacks are not available in colors, or with dust covers and do not accept strain reliefs. Colors are approximate and for reference only.

SL Series Modular Jack Strain Reliefs

A



B



- Provide strain relief for terminated cables in the Work Area
- For use with unshielded SL Series Modular Jacks only

Description	Color	Figure	Part Number
Bend-Limiting Strain Relief	Smoked Gray	A	1375200-1
Strain Relief	Clear	B	1375157-1

SL Series, Category 6 Modular Couplers

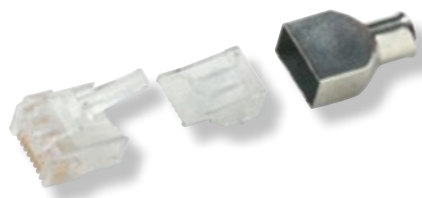


- Compact couplers for two modular plugs
- Snaps into 0.585" x 0.790" cut-outs
- Wired one-to-one

02

Description		Part Number
Category 6 SL Coupler	Unshielded	2111123-1
	Shielded	2111124-1

Category 6, 8-Position Modular Plug



- Each kit includes:
1 - Modular plug assembly
1 - Wire holder
1 - Strain relief
- RoHS compliant
- Molded with UL94V-0 plastic
- UL Listed: E81956
- Category 6 modular plug tooling in Chapter 22
- Modular plug to die set cross reference on page 2 of this chapter

Description	Conductor	Insulation O.D. in (mm)	Cable Jacket O.D. in (mm)	500 per Box	100 per Box	25 per Box
Unshielded or Shielded	Solid	0.035 (0.89) - 0.043 (1.09)	0.20 (5.0) — 0.24 (6.0)	5-1375204-4	5-1375204-3	5-1375204-4
		0.035 (0.89) - 0.043 (1.09)	0.24 (6.0) — 0.28 (7.0)	5-1479185-4	5-1479185-3	5-1479185-4
	Stranded	0.035 (0.89) - 0.043 (1.09)	0.20 (5.0) — 0.24 (6.0)	5-1375202-4	5-1375202-3	5-1375202-4
		0.035 (0.89) - 0.043 (1.09)	0.24 (6.0) — 0.28 (7.0)	5-1479184-4	5-1479184-3	5-1479184-4

Modular Plug Boots for Category 6 Modular Plugs

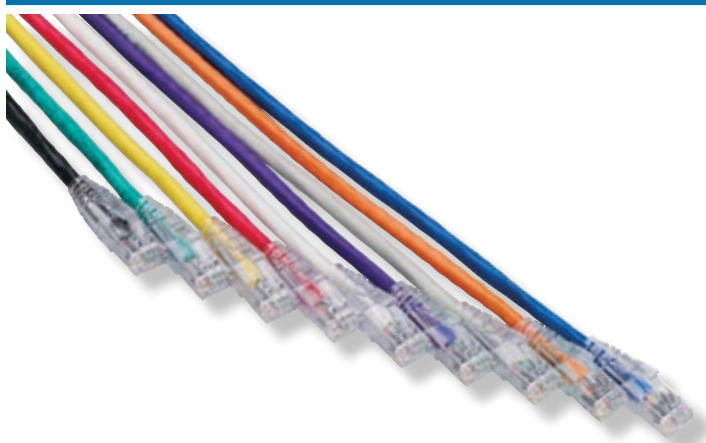


- For use with Category 6, 8-Position modular plugs
- Accept cables with diameters as listed
- Colors in table are approximate

Color	Maximum Cable O.D. 6 mm [0.24 in]		Maximum Cable O.D. 6.5 mm [0.26 in]	
	2400 Per Box	100 Per Box	2400 Per Box	100 Per Box
White	2-737893-1	9-737893-1	2-336513-1	9-336513-1
Gray	2-737893-2	9-737893-2	2-336513-2	9-336513-2
Red	2-737893-3	9-737893-3	2-336513-3	9-336513-3
Blue	2-737893-4	9-737893-4	2-336513-4	9-336513-4
Green	2-737893-5	9-737893-5	2-336513-5	9-336513-5
Yellow	2-737893-6	9-737893-6	2-336513-6	9-336513-6
Black	2-737893-7	9-737893-7	2-336513-7	9-336513-7
Orange	—	—	2-336513-8	9-336513-8
Violet	—	—	2-336513-9	9-336513-9

Category 6 Slim Line Patch Cable Assemblies

02



- Slim plug and boot design provide additional space between adjacent plugs
- Meets or exceeds Category 6 performance standards
- 4-Pair stranded Unshielded 24 AWG conductors
- Non-plenum (CM rated)
- Universal wiring (T568A/T568B)
- Lead-Free (no heavy metals)
- Colors in table are approximate

Length	Black	Gray	Blue	Green	Red	White	Yellow	Orange	Violet
2 ft [0.61 m]	1933116-2	1933117-2	1933118-2	1933119-2	1933120-2	1933121-2	1933122-2	1933123-2	1933124-2
3 ft [0.91 m]	1933116-3	1933117-3	1933118-3	1933119-3	1933120-3	1933121-3	1933122-3	1933123-3	1933124-3
4 ft [1.22 m]	1933116-4	1933117-4	1933118-4	1933119-4	1933120-4	1933121-4	1933122-4	1933123-4	1933124-4
5 ft [1.52 m]	1933116-5	1933117-5	1933118-5	1933119-5	1933120-5	1933121-5	1933122-5	1933123-5	1933124-5
6 ft [1.83 m]	1933116-6	1933117-6	1933118-6	1933119-6	1933120-6	1933121-6	1933122-6	1933123-6	1933124-6
7 ft [2.13 m]	1933116-7	1933117-7	1933118-7	1933119-7	1933120-7	1933121-7	1933122-7	1933123-7	1933124-7
8 ft [2.44 m]	1933116-8	1933117-8	1933118-8	1933119-8	1933120-8	1933121-8	1933122-8	1933123-8	1933124-8
9 ft [2.74 m]	1933116-9	1933117-9	1933118-9	1933119-9	1933120-9	1933121-9	1933122-9	1933123-9	1933124-9
10 ft [3.05 m]	1-1933116-0	1-1933117-0	1-1933118-0	1-1933119-0	1-1933120-0	1-1933121-0	1-1933122-0	1-1933123-0	1-1933124-0
12 ft [3.66 m]	1-1933116-2	1-1933117-2	1-1933118-2	1-1933119-2	1-1933120-2	1-1933121-2	1-1933122-2	1-1933123-2	1-1933124-2
14 ft [4.27 m]	1-1933116-4	1-1933117-4	1-1933118-4	1-1933119-4	1-1933120-4	1-1933121-4	1-1933122-4	1-1933123-4	1-1933124-4
15 ft [4.57 m]	1-1933116-5	1-1933117-5	1-1933118-5	1-1933119-5	1-1933120-5	1-1933121-5	1-1933122-5	1-1933123-5	1-1933124-5
16 ft [4.88 m]	1-1933116-6	1-1933117-6	1-1933118-6	1-1933119-6	1-1933120-6	1-1933121-6	1-1933122-6	1-1933123-6	1-1933124-6
20 ft [6.10 m]	2-1933116-0	2-1933117-0	2-1933118-0	2-1933119-0	2-1933120-0	2-1933121-0	2-1933122-0	2-1933123-0	2-1933124-0
25 ft [7.62 m]	2-1933116-5	2-1933117-5	2-1933118-5	2-1933119-5	2-1933120-5	2-1933121-5	2-1933122-5	2-1933123-5	2-1933124-5
30 ft [9.14 m]	3-1933116-0	3-1933117-0	3-1933118-0	3-1933119-0	3-1933120-0	3-1933121-0	3-1933122-0	3-1933123-0	3-1933124-0
40 ft [12.19 m]	4-1933116-0	4-1933117-0	4-1933118-0	4-1933119-0	4-1933120-0	4-1933121-0	4-1933122-0	4-1933123-0	4-1933124-0
50 ft [15.24 m]	5-1933116-0	5-1933117-0	5-1933118-0	5-1933119-0	5-1933120-0	5-1933121-0	5-1933122-0	5-1933123-0	5-1933124-0

Category 6 Ethernet Crossover Cable Assemblies

- Category 6 crossover cables are compatible with 10/100BASE-T, as well as IEEE 802.3 1000BASE-T
- For other lengths and wiring diagrams, see Customer Drawing
- Lead-Free (no heavy metals)
- Features black plug boots and red cable

Description	Cable/Boot Color	Length	Part Number
Category 6 Ethernet Crossover Cable Assemblies	Red/Black	3 ft [0.91 m]	1499150-3
		5 ft [1.52 m]	1499150-5
		7 ft [2.13 m]	1499150-7
		10 ft [3.05 m]	1-1499150-0
		12 ft [3.66 m]	1-1499150-2
		15 ft [4.57 m]	1-1499150-5
		25 ft [7.62 m]	2-1499150-5

Category 6 SL Series Patch Panels

02

A



Back of Interface housing



Front of Interface housing

B

Angled



C

Standard



C

Angled



D

Standard



D

Angled



- Meets or exceeds TIA and ISO Category 6 component performance requirements
- Angled panels allow elimination of horizontal cable management for higher rack densities and ease of cable dress
- Ports may be individually replaced
- All panels are packaged unloaded with jacks bagged separately for termination with SL Series Jack Termination Tool, see Chapter 22
Universal wiring – may be terminated to T568A or T568B
- Replacement labels and clear label covers in Chapter 17
- 12-Port Mini Patch Panels mount vertically on 89D bracket (included)
- 48-port, 1U patch panels:
 - Accommodate adhesive labels or icons for port identification
 - Are supplied with 48 specially designed SL Series jacks (these jacks can not be purchased separately – they are supplied with panel assembly only)
- For multimedia (no included connectivity) patch panels, see Chapter 15
- Accommodates icons (sold separately, see Chapter 17)

Port Count	Rack Mount Units	Height	Width	Figure	Standard	Angled
12	–	10.00 in [25.40 cm]	2.3 in [5.84 cm]	A	1375013-2	–
24	1	1.75 in [4.44 cm]	19.0 in [48.26 cm]	B	1375014-2	1499600-2
	1	1.75 in [cm]	19.0 in [48.26 cm]	C	1933458-1*	1933658-1*
48	2	3.50 in [8.89 cm]	19.0 in [48.26 cm]	D	1375015-2	1499601-2
96	4	7.00 in [17.78 cm]	19.0 in [48.26 cm]		1375016-2	–

*NOTE: 1U 48-port panel does not accept standard SL Series jacks





Category 5e General Product Information..... 02-03

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520 Series, Category 5e F/UTP Cable04

520 Series, Category 5e UTP Cable04

SL Series Category 5e Modular Jacks05

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110Connect XC Category 5e Connecting Blocks09

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Category 5e Patch Panels.....12

Twisted Pair Cable Information

03

Cable Packaging Reference



WR = Wooden Reels



RB = Reel-in-a-Box



PB = Pull Box

NOTE: Unless otherwise specified, all lengths are 1000 feet (305 meters). Other lengths and colors available. Call for details. Package types are listed in each chart.

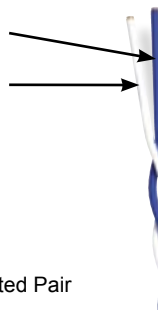
Twisted Pair Cable Temperatures

Category	Condition	Riser/Plenum
5e	Storage	-4 – 140°F (-20 – 60°C)
	Operating	-4 – 140°F (-20 – 60°C)
	Installation	40 – 140°F (4 – 60°C)

4-Pair Conductor Color Code

Ring Conductor

Tip Conductor



Twisted Pair

Pair	Tip	Ring	Jacket Color
1	White	Blue	Blue
2	White	Orange	Orange
3	White	Green	Green
4	White	Brown	Brown

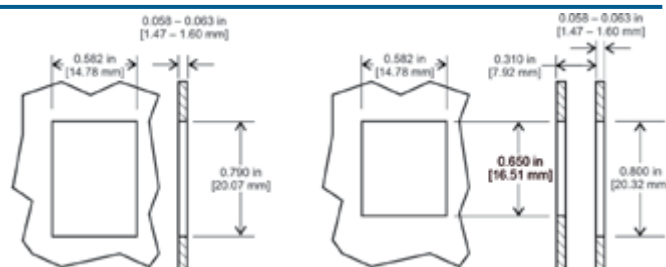
25-Pair Conductor Color Code

Color Group	Pair	Conductor	Jacket Color	Stripe Color
White (1)	1	Tip	White	Blue
		Ring	Blue	White
	2	Tip	White	Orange
		Ring	Orange	White
	3	Tip	White	Green
		Ring	Green	White
	4	Tip	White	Brown
		Ring	Brown	White
	5	Tip	White	Slate
		Ring	Slate	White
Red (2)	6	Tip	Red	Blue
		Ring	Blue	Red
	7	Tip	Red	Orange
		Ring	Orange	Red
	8	Tip	Red	Green
		Ring	Green	Red
	9	Tip	Red	Brown
		Ring	Brown	Red
	10	Tip	Red	Slate
		Ring	Slate	Red
Black (3)	11	Tip	Black	Blue
		Ring	Blue	Black
	12	Tip	Black	Orange
		Ring	Orange	Black
	13	Tip	Black	Green
		Ring	Green	Black
	14	Tip	Black	Brown
		Ring	Brown	Black
	15	Tip	Black	Slate
		Ring	Slate	Black

Color Group	Pair	Conductor	Jacket Color	Stripe Color
Yellow (4)	16	Tip	Yellow	Blue
		Ring	Blue	Yellow
	17	Tip	Yellow	Orange
		Ring	Orange	Yellow
	18	Tip	Yellow	Green
		Ring	Green	Yellow
	19	Tip	Yellow	Brown
		Ring	Brown	Yellow
	20	Tip	Yellow	Slate
		Ring	Slate	Yellow
Violet (5)	21	Tip	Violet	Blue
		Ring	Blue	Violet
	22	Tip	Violet	Orange
		Ring	Orange	Violet
	23	Tip	Violet	Green
		Ring	Green	Violet
	24	Tip	Violet	Brown
		Ring	Brown	Violet
	25	Tip	Violet	Slate
		Ring	Slate	Violet

Suggested Modular Jack Cutouts

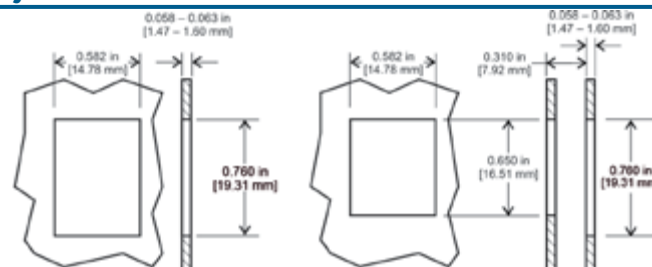
SL Series and 110Connect



Suggested Single Panel Cutout

Suggested Flush Mount Panel Application Cutout

Keystone



Suggested Single Panel Cutout

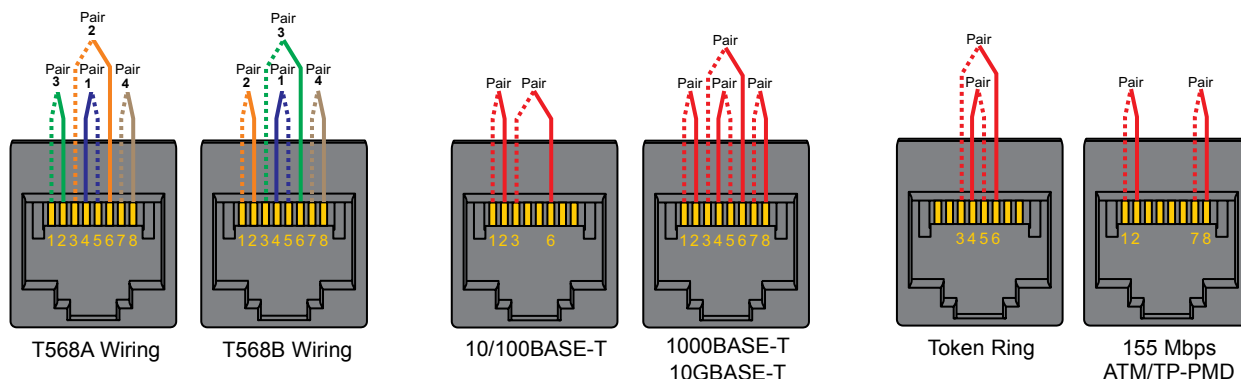
Suggested Flush Mount Panel Application Cutout

03

AMP NETCONNECT Modular Jack Technical Reference

Modular Jack Mating Cycles	110 Contacts Terminations	Modular Jack Pull Force	Voltage	Operating Temperature	Approvals
750	200	20 lbs (89 N)	150 VAC max.	-40° — 70°C (-40° — 158°F)	UL Listed File Number: E81956

Application Wiring Diagrams for Modular Jacks

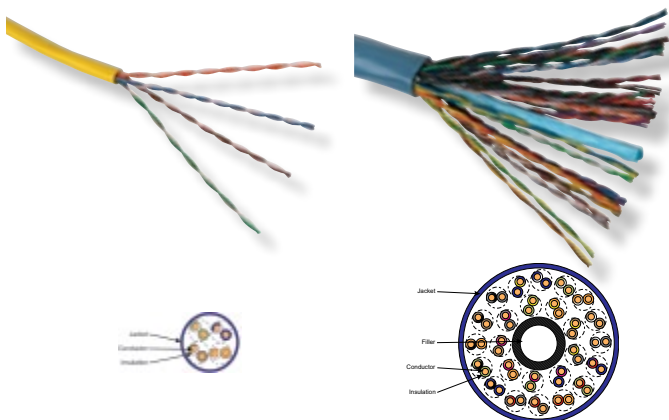


Die Set/Tool to Modular Plug Cross-Reference

Modular Plug Kits	Individual Modular Plug Die Sets for Hand Tool 2-231652-0	
	1-231666-4	1-853400-0
1479583	X	X
1479584	X	X
1479585	X	X
1479586	X	X
558530	X	X
569278	X	X
569550	X	X
569552	X	X

510 Series, Category 5e UTP Cable

03



- Independently verified by Intertek ETL SEMKO testing services
- Meets or exceeds ANSI/TIA-568-C.2 Enhanced Category 5 and ISO 11801: 2002 Class D specifications
- UL & cUL Listed (CMR/CMP)
- 24 AWG, solid conductors
- Lead-free (no heavy metals)
- 4-Pair Cables:
 - Performance characterized to 200 MHz
 - 2 dB NEXT performance above Category 5e
 - Meets or exceeds all requirements for Gigabit Ethernet



UL/NEC Ratings	Pair Count	Package	Part Number				Weight lbs/kft	Vp (%nom)	Dimensions (in)	
			White	Gray	Blue	Yellow			Dielectric	Outside
CMR	4	RB	219538-2	219538-4	219538-6	219538-8	24	70	0.037	0.20
		WR	219538-1	219538-3	219538-5	219538-7				
		PB	6-219538-2	6-219538-4	6-219538-6	6-219538-8				
CMP	25	WR	1499418-1	1499418-2	1499418-3	1499418-4	134	69	0.032	0.50
		RB	219513-2	219513-4	219513-6	219513-8				
		WR	219513-1	219513-3	219513-5	219513-7				
		PB	6-219513-2	6-219513-4	6-219513-6	6-219513-8				
		WR	1499419-1	1499419-2	1499419-3	1499419-4				

520 Series, Category 5e F/UTP Cable



- Meets or exceeds ANSI/TIA-568-C.2 Enhanced Category 5 and ISO 11801: 2002 Class D specifications
- Independently verified by Intertek ETL SEMKO testing services
- UL & cUL Listed (CMR/CMP)
- Exceeds all requirements for Gigabit Ethernet
- 24 AWG, solid conductors
- Lead-free (no heavy metals)



UL/NEC Ratings	Pair Count	Package	Part Number				Weight lbs/kft	Vp (%nom)	Dimensions (in)	
			White	Gray	Blue	Violet			Dielectric	Outside
CMR	4	WR	1499171-1	1499171-3	1499171-5	1-1499171-7	31	72	0.041	0.240
CMP	4	WR	1499172-1	1499172-3	1499172-5	—	29	72	0.042	0.219

520 Series, Category 5e UTP Cable

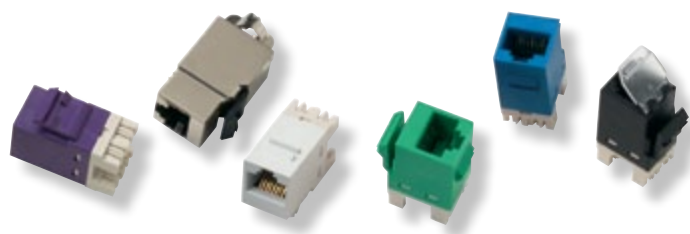


- Performance characterized to 350 MHz
- 5 dB NEXT performance above Category 5E
- Meets or exceeds ANSI/TIA-568-C.2 Enhanced Category 5 and ISO Class D 11801:2002 specifications
- Independently verified by Intertek ETL SEMKO testing services
- UL & cUL listed (CMR/CMP)
- Gigabit Ethernet zero bit error rate independently certified by Intertek ETL SEMKO testing services
- Lead-free (no heavy metals)
- 24 AWG, solid conductors



UL/NEC Ratings	Pair Count	Package	Part Number				Weight lb/kft	Vp (%nom)	Dimension (in)	
			White	Gray	Blue	Yellow			Dielectric	Outside
CMR	4	RB	57826-2	57826-4	57826-6	57826-8	24	70	0.037	0.20
		WR	57826-1	57826-3	57826-5	57826-7				
		PB	6-57826-2	6-57826-4	6-57826-6	6-57826-8				
CMP	4	RB	57825-2	57825-4	57825-6	57825-8	22	74	0.035	0.19
		WR	57825-1	57825-3	57825-5	57825-7				
		PB	6-57825-2	6-57825-4	6-57825-6	6-57825-8				

SL Series Category 5e Modular Jacks

03


- Thin profile improves outlet density
- Modular Jacks available with integral dust covers
- 180° or 90° cable dress for easy termination
- Universal wiring label permits wiring to T568A or T568B
- Meets or exceeds all TIA and ISO component performance requirements
- Bend-limiting strain relief included with unshielded jacks
- UL Listed: E81956
- 8-Position RJ45 Modular Jacks for 1, 2, 3 and 4-Pair applications
- Can be terminated with either SL Series Modular Jack Termination Tool (1725150-1) or standard 110 punch-down tools, see Chapter 22
- RoHS compliant
- The bulk option is 25 jacks per bag, 4 bags per carton

Shielding	Cable Entry	Jack Color	Without Dust Cover	With Dust Cover	Without Dust Cover Bulk Packaged
Unshielded	90° (Side) or 180° (Rear)	Almond	1375191-1	1375190-1	2-1375191-1
		Black	1375191-2	1375190-2	2-1375191-2
		White	1375191-3	1375190-3	2-1375191-3
		Gray	1375191-4	1375190-4	2-1375191-4
		Orange	1375191-5	1375190-5	2-1375191-5
		Blue	1375191-6	1375190-6	2-1375191-6
		Red	1375191-7	1375190-7	2-1375191-7
		Yellow	1375191-8	1375190-8	2-1375191-8
		Green	1375191-9	1375190-9	2-1375191-9
		Violet	1-1375191-0	1-1375190-0	3-1375191-0
		Electrical Ivory	1-1375191-1	1-1375190-1	3-1375191-1
		Alpine White	1-1375191-3	1-1375190-3	3-1375191-3
Shielded	180° (Rear)	Black	1375189-1*	—	—
	90° (Side)	Black	1479717-1*	—	—

*Note: Shielded jacks are not available in colors, or with dust covers and do not accept strain reliefs. Colors are approximate and for reference only.

SL Series Modular Jack Strain Reliefs



- Provide strain relief for terminated cables in the work area
- For use with unshielded SL Series modular jacks only

Description	Used with	Color	Figure	Part Number
Bend-Limiting Strain Relief	Category 5E	Blue	A	1375200-2
Strain Relief	Category 6, 5E, 3	Clear	B	1375157-1

SL Series Modular Couplers



- Compact couplers for two modular plugs
- Snaps into 0.585 in x 0.790 in cut-outs
- Wired one-to-one

Description	Shielding	Figure	Part Number
Category 5e SL Coupler	Unshielded	A	2111121-1
	Shielded		2111122-1

SL Series Toolless Category 5e Modular Jacks

03

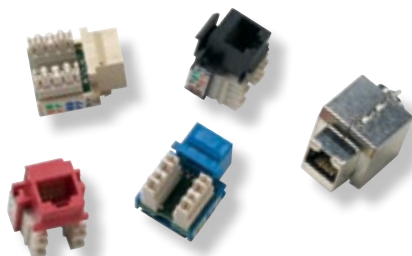


- Thin profile improves outlet density
- Terminate with common pliers
- Hinged stuffer cap simplifies assembly
- Jacks available with integral dust covers
- Universal wiring label permits wiring to T568A or T568B
- Meets or exceeds all TIA and ISO component performance requirements
- UL Listed: E81956
- 8-Position RJ45 Modular Jacks for 1, 2, 3 and 4-Pair applications
- RoHS compliant

Shielding	Cable Entry	Jack Color	Without Dust Cover	With Dust Cover
Unshielded	90° (Side) or 180° (Rear)	Almond	1116604-1	1339189-1
		Black	1116604-2	1339189-2
		White	1116604-3	1339189-3
		Gray	1116604-4	1339189-4
		Orange	1116604-5	1339189-5
		Blue	1116604-6	1339189-6
		Red	1116604-7	1339189-7
		Yellow	1116604-8	1339189-8
		Green	1116604-9	1339189-9
		Violet	1-1116604-0	1-1339189-0
		Electrical Ivory	1-1116604-1	1-1339189-1
		Black	1339015-1*	—
Shielded	180° (Rear)	Black	1339015-1*	—

*Note: Shielded jacks are not available in colors, or with dust covers and do not accept strain reliefs. Colors are approximate and for reference only.

110Connect Category 5e Modular Jacks

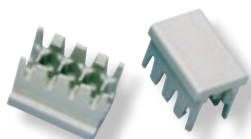


- Category 5E Modular Jacks meet or exceed TIA and ISO requirements
- Universal wiring label permits termination to either T568A or T568B
- UL Listed: E81956
- Can be terminated with standard 110 punch-down tools, see Chapter 22
- RoHS compliant
- The bulk option is 25 jacks per bag, 4 bags per carton

Shielding	Jack Color	Standard Packaging	Bulk Packaging
Unshielded	Almond	406372-1	2-406372-1
	Black	406372-2	2-406372-2
	White	406372-3	2-406372-3
	Gray	406372-4	2-406372-4
	Orange	406372-5	2-406372-5
	Blue	406372-6	2-406372-6
	Red	406372-7	2-406372-7
	Yellow	406372-8	2-406372-8
	Green	406372-9	2-406372-9
	Violet	1-406372-0	3-406372-0
	Electrical Ivory	1-406372-1	3-406372-1
	Alpine White	1-406372-3	3-406372-3
Shielded	Black	1116515-1*	—

*Note: Shielded jacks are not available in colors, or with dust covers and do not accept strain reliefs. Colors are approximate and for reference only.

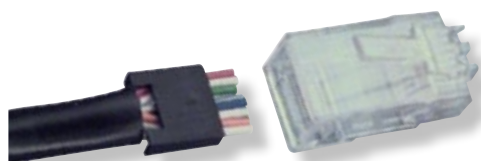
110Connect Stuffer Caps



- Available as an alternative termination method
- Provide additional strain relief
- Each stuffer cap accommodates 2 pairs
- For 110Connect Modular Jacks only
- Available in bags of 50

Description	Part Number
110Connect Stuffer Caps	569332-1

Category 5e Modular Plugs



- Meets TIA and ISO requirements for component performance
- Modular plug tooling in Chapter 22
- Each kit includes:
 - Plug housing
 - Load bar
- Load bar helps maintain pair twist
- RoHS compliant
- Molded with UL94V-0 Plastic
- UL Listed: E81956
- Modular Plug to Die Set cross reference on page 3

03

Description	AWG	Insulation O.D. in (mm)	Cable Jacket O.D. in (mm)	Conductor	Quantity per Box		
					500	100	25
Unshielded	24	≤ 0.039 (0.99)	0.190 (4.83) – 0.220 (5.59)	Stranded	5-558530-2	5-558530-3	5-558530-4
	28 – 24	0.035 (0.89) – 0.039 (0.99)	0.190 (4.83) – 0.200 (5.08)	Solid	5-569278-2	5-569278-3	5-569278-4
Shielded	26 – 24	0.035 (0.89) – 0.039 (0.99)	0.190 (4.83) – 0.200 (5.08)	Stranded	5-569552-2	5-569552-3	5-569552-4
				Solid	5-569550-2	5-569550-3	5-569550-4

Modular Plug Boots



- For use with Category 3, 5 and 5e
- 8-position modular plugs
- Accept cables with a maximum diameter of 0.210 in (5.33 mm)

Description	Color	Part Number
Modular Plug Boots	Black	569875-1
	Almond	569875-2
	Red	569875-3
	Green	569875-4
	Blue	569875-5
	Yellow	569875-6
	Orange	569875-7
	White	569875-8
	Violet	569875-9
	Gray	1-569875-0

NOTE: Colors are approximate and for reference only.

External Strain Reliefs For Modular Plugs



- Metal strain relief that positively engages plug housing
- PRO-CRIMPER Tool and Die Set in Chapter 22
- For use with 8-position Category 3, 5 and 5e Modular Plugs only
- RoHS compliant

Description	Part Number
Not for use with Modular Plug Boots	558527-1
For use with Modular Plug Boots	558527-3

Field Terminable 110Connect XC Patch Plugs



- 24 AWG stranded conductors
- Verified for Category 5e performance
- Available in various pair combinations
- Factory-terminated cable assemblies in on page 9

Description	Part Number
1-Pair	569477-1
2-Pair	569478-1
4-Pair	569480-1

Category 5e Patch Cable Assemblies

03



- Meets or exceeds Category 5e performance standards
- Unshielded cable assemblies contain 4-Pair stranded 24 AWG conductors
- Shielded cable assemblies contain 4-Pair stranded 26 AWG conductors
- Non-Plenum (CM rated)
- Booted cable assemblies include color-matched snagless boots
- Universal wiring (T568A/T568B)
- Lead-Free (no heavy metals)
- Jacket colors are available as listed

Length	Shielding	Boot	Black	Gray	Blue	Green	Red	White	Yellow	Orange	Violet
2 ft [0.61 m]	Unshielded	Booted	406483-2	219241-2	219242-2	219243-2	219244-2	219245-2	219246-2	219184-2	1499094-2
	Unshielded	Bootless	1499110-2	1499111-2	1499112-2	1499113-2	1499114-2	1499115-2	1499116-2	1499117-2	1499118-2
3 ft [0.91 m]	Unshielded	Booted	406483-3	219241-3	219242-3	219243-3	219244-3	219245-3	219246-3	219184-3	1499094-3
	Unshielded	Bootless	1499110-3	1499111-3	1499112-3	1499113-3	1499114-3	1499115-3	1499116-3	1499117-3	1499118-3
4 ft [1.22 m]	Unshielded	Booted	406483-4	219241-4	219242-4	219243-4	219244-4	219245-4	219246-4	219184-4	1499094-4
	Unshielded	Bootless	1499110-4	1499111-4	1499112-4	1499113-4	1499114-4	1499115-4	1499116-4	1499117-4	1499118-4
5 ft [1.52 m]	Unshielded	Booted	406483-5	219241-5	219242-5	219243-5	219244-5	219245-5	219246-5	219184-5	1499094-5
	Unshielded	Bootless	1499110-5	1499111-5	1499112-5	1499113-5	1499114-5	1499115-5	1499116-5	1499117-5	1499118-5
6 ft [1.83 m]	Unshielded	Booted	406483-6	219241-6	219242-6	219243-6	219244-6	219245-6	219246-6	219184-6	1499094-6
	Unshielded	Bootless	1499110-6	1499111-6	1499112-6	1499113-6	1499114-6	1499115-6	1499116-6	1499117-6	1499118-6
7 ft [2.13 m]	Unshielded	Booted	406483-7	219241-7	219242-7	219243-7	219244-7	219245-7	219246-7	219184-7	1499094-7
	Unshielded	Bootless	1499110-7	1499111-7	1499112-7	1499113-7	1499114-7	1499115-7	1499116-7	1499117-7	1499118-7
8 ft [2.44 m]	Unshielded	Booted	406483-8	219241-8	219242-8	219243-8	219244-8	219245-8	219246-8	219184-8	1499094-8
	Unshielded	Bootless	1499110-8	1499111-8	1499112-8	1499113-8	1499114-8	1499115-8	1499116-8	1499117-8	1499118-8
9 ft [2.74 m]	Unshielded	Booted	406483-9	219241-9	219242-9	219243-9	219244-9	219245-9	219246-9	219184-9	1499094-9
	Unshielded	Bootless	1499110-9	1499111-9	1499112-9	1499113-9	1499114-9	1499115-9	1499116-9	1499117-9	1499118-9
10 ft [3.05 m]	Unshielded	Booted	1-406483-0	1-219241-0	1-219242-0	1-219243-0	1-219244-0	1-219245-0	1-219246-0	1-219184-0	1-1499094-0
	Unshielded	Bootless	1-1499110-0	1-1499111-0	1-1499112-0	1-1499113-0	1-1499114-0	1-1499115-0	1-1499116-0	1-1499117-0	1-1499118-0
12 ft [3.66 m]	Unshielded	Booted	1-406483-2	1-219241-2	1-219242-2	1-219243-2	1-219244-2	1-219245-2	1-219246-2	1-219184-2	1-1499094-2
	Unshielded	Bootless	1-1499110-2	1-1499111-2	1-1499112-2	1-1499113-2	1-1499114-2	1-1499115-2	1-1499116-2	1-1499117-2	1-1499118-2
14 ft [4.27 m]	Unshielded	Booted	1-406483-4	1-219241-4	1-219242-4	1-219243-4	1-219244-4	1-219245-4	1-219246-4	1-219184-4	1-1499094-4
	Unshielded	Bootless	1-1499110-4	1-1499111-4	1-1499112-4	1-1499113-4	1-1499114-4	1-1499115-4	1-1499116-4	1-1499117-4	1-1499118-4
15 ft [4.57 m]	Unshielded	Booted	1-406483-5	1-219241-5	1-219242-5	1-219243-5	1-219244-5	1-219245-5	1-219246-5	1-219184-5	1-1499094-5
	Unshielded	Bootless	1-1499110-5	1-1499111-5	1-1499112-5	1-1499113-5	1-1499114-5	1-1499115-5	1-1499116-5	1-1499117-5	1-1499118-5
16 ft [4.88 m]	Unshielded	Booted	1-406483-6	1-219241-6	1-219242-6	1-219243-6	1-219244-6	1-219245-6	1-219246-6	1-219184-6	1-1499094-6
	Unshielded	Bootless	1-1499110-6	1-1499111-6	1-1499112-6	1-1499113-6	1-1499114-6	1-1499115-6	1-1499116-6	1-1499117-6	1-1499118-6
20 ft [6.10 m]	Unshielded	Booted	2-406483-0	2-219241-0	2-219242-0	2-219243-0	2-219244-0	2-219245-0	2-219246-0	2-219184-0	2-1499094-0
	Unshielded	Bootless	2-1499110-0	2-1499111-0	2-1499112-0	2-1499113-0	2-1499114-0	2-1499115-0	2-1499116-0	2-1499117-0	2-1499118-0
25 ft [7.62 m]	Unshielded	Booted	2-406483-5	2-219241-5	2-219242-5	2-219243-5	2-219244-5	2-219245-5	2-219246-5	2-219184-5	2-1499094-5
	Unshielded	Bootless	2-1499110-5	2-1499111-5	2-1499112-5	2-1499113-5	2-1499114-5	2-1499115-5	2-1499116-5	2-1499117-5	2-1499118-5
30 ft [9.14 m]	Unshielded	Booted	3-406483-0	3-219241-0	3-219242-0	3-219243-0	3-219244-0	3-219245-0	3-219246-0	3-219184-0	3-1499094-0
	Unshielded	Bootless	3-1499110-0	3-1499111-0	3-1499112-0	3-1499113-0	3-1499114-0	3-1499115-0	3-1499116-0	3-1499117-0	3-1499118-0
40 ft [12.19 m]	Unshielded	Booted	4-406483-0	4-219241-0	4-219242-0	4-219243-0	4-219244-0	4-219245-0	4-219246-0	4-219184-0	4-1499094-0
	Unshielded	Bootless	4-1499110-0	4-1499111-0	4-1499112-0	4-1499113-0	4-1499114-0	4-1499115-0	4-1499116-0	4-1499117-0	4-1499118-0
50 ft [15.24 m]	Unshielded	Booted	5-406483-0	5-219241-0	5-219242-0	5-219243-0	5-219244-0	5-219245-0	5-219246-0	5-219184-0	5-1499094-0
	Unshielded	Bootless	5-1499110-0	5-1499111-0	5-1499112-0	5-1499113-0	5-1499114-0	5-1499115-0	5-1499116-0	5-1499117-0	5-1499118-0

NOTE: Jacket colors are approximate and for reference only.

Ethernet Crossover Cable Assemblies

- Category 5e crossover cables are compatible with IEEE 802.3 10/100BASE-T for other lengths and wiring diagrams, see Customer Drawing
- Lead-Free (no heavy metals)

03

Performance	Cable	Boot Color	Length	Part Number
Category 5e	White	Black	3 ft [0.91 m]	1499151-3
			5 ft [1.52 m]	1499151-5
			10 ft [3.05 m]	1-1499151-0
			12 ft [3.66 m]	1-1499151-2
			15 ft [4.57 m]	1-1499151-5

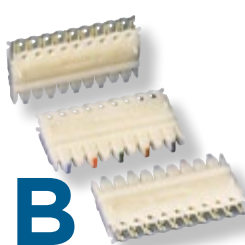
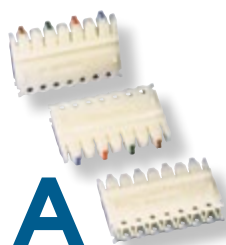
110Connect XC Category 5e Cable Assemblies



- Meets or exceeds Category 5e performance requirements
- 4-Pair stranded unshielded 24 AWG conductors
- Modular RJ45 plugs feature color-matched snagless boots
- 110Connect XC to RJ45 patch cable assemblies must be selected to match wiring pattern of work area outlet wiring
- Non-plenum (CM rated)
- Universal wiring (T568A/T568B)
- Lead-Free (no heavy metals)

Connector		Pair Count	Wiring	2 ft [0.61 m]	4 ft [1.22 m]	6 ft [1.83 m]	8 ft [2.44 m]	10 ft [3.05 m]
End A	End B							
110Connect XC	110Connect XC	1	—	569523-2	569523-4	569523-6	569523-8	1-569523-0
		2	—	569524-2	569524-4	569524-6	569524-8	1-569524-0
		4	—	569526-2	569526-4	569526-6	569526-8	1-569526-0
	RJ45	4	T568A	569527-2	569527-4	569527-6	569527-8	1-569527-0
		4	T568B	569528-2	569528-4	569528-6	569528-8	1-569528-0
		2	T568A, 10/100BASE-T	569685-2	569685-4	569685-6	569685-8	1-569685-0
		2	T568B, 10/100BASE-T	569669-2	569669-4	569669-6	569669-8	1-569669-0

110Connect XC Category 5e Connecting Blocks

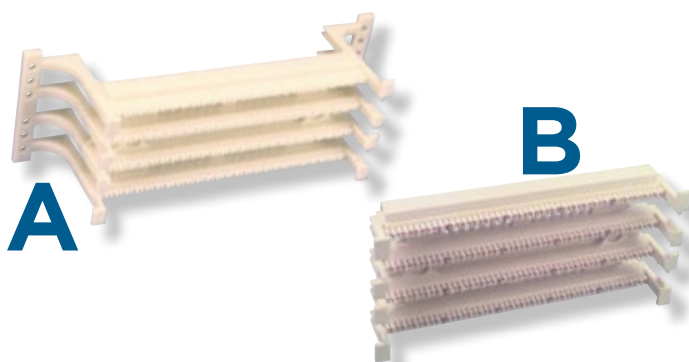


- Utilize double-ended insulation displacement contacts (IDC) that terminate 24-22 AWG solid or stranded conductors with a maximum O.D. of .063 inch
- Available in 4- and 5-pair sizes with the appropriate color coding
- Supports applications from voice to high-speed data
- Meets or exceeds the TIA specifications for Category 5e
- All components compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter XXX), the KRONE Tool and the 788J1 5-pair tool
- UL listed
- CSA and Austel approved

Description	Pair Count	Figure	Part Number
Connecting Blocks	4	A	558401-1
	5	B	558402-1

110Connect XC Category 5e Wiring Blocks

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- Accept 24-22 AWG conductor
- Blocks are available in 50, 100 and 300-pair sizes with legs for blackboard mounting
- Labels available, see Chapter 17
- Supports applications from voice to high-speed data
- Offers a reliable and economical high-density system
- Meets or exceeds the TIA specifications for Category 5e
- All components are compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter 22), the KRONE Tool and the 788J1 5-pair tool
- UL listed
- CSA and Austel approved

Description	Legs	Pair Count	Figure	Part Number
Wiring Blocks	With	50		558841-1
		100	A	558842-1
		300		558843-1
	Without	50		558839-1
		100	B	558840-1

110Connect XC Category 5e Kits



- Kits include wiring blocks with legs, connecting blocks, designation strips and white labels for the pair counts identified
- Additional labels available, see Chapter 17
- Supports applications from voice to high-speed data
- Offers a reliable and economical high-density system
- Meets or exceeds the TIA specifications for Category 5e
- All components compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter 22), the KRONE Tool and the 788J1 5-pair tool
- UL listed
- CSA and Austel approved

Pair Count	Included 4-Pair Connecting Blocks	Included 5-Pair Connecting Blocks	Part Number
50	10	2	569433-1
	0	10	569434-1
100	20	4	569439-1
	0	20	569440-1
300	60	12	569445-1
	0	60	569446-1

Adapter for 89B Bracket



- Used to mount a 50-pair 110Connect XC wiring block on a 89B bracket
- Two adapters are required for each assembly
- Wiring blocks and 89B brackets purchased separately

Description	Part Number
Adapter for 89B Bracket	558838-1

110Connect XC Category 5e Cross-Connect Distribution Frame Kits

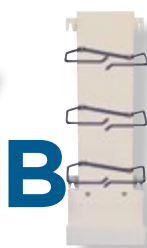
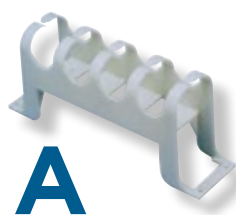


- Reduce time needed for planning and installing a cross-connect on a backboard
- Include metal back frame, wiring blocks, connecting blocks, cable management troughs, designation strips and appropriate hardware
- Quick and easy installation
- Available in 300 and 900-pair sizes with 4 and 5-pair connecting blocks
- Supports applications from voice to high-speed data
- Offers a reliable and economical high-density system
- Meets or exceeds the TIA specifications for Category 5e
- All components compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter 22), the KRONE Tool and the 788J1 5-pair tool
- UL listed
- CSA and Austel approved

03

Pair Count	Included 4-Pair Connecting Blocks	Included 5-Pair Connecting Blocks	Part Number
300	60	12	569854-1
	0	60	569855-1
900	120	24	569857-1
	0	120	569858-1

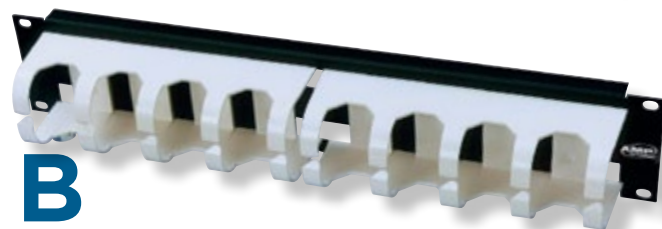
110Connect XC Cable Management



- Cable Management Frames and Cable Management Rings provide high capacity storage of patch cables and jumper wire
- Cable Management Trough provides horizontal management and organization of patch cables and jumper wire
- Troughs are available with or without legs
- Suitable for mounting directly to a plywood backboard
- Quick and easy installation

Description	Color	Option	Figure	Part Number
Cable Management Trough	White	With Legs	A	569389-1
		Without Legs		569597-1
Vertical Cable Management Frame	White	300-Pair	B	569851-1
		900-Pair		569852-1
Cable Management Rings	Black	5.7" W	C	569431-1
		8.5" W		569599-1

110Connect XC Category 5e Cross-Connect Rack Mount Panel



- For mounting cross-connect hardware on a 19" rack
- Wiring block and cable management panels available
- Labels available, see Chapter 17
- Connecting blocks and plastic label covers purchased separately, see Chapter 17
- Rack Mount Cable Management Panels provide horizontal management and organization of patch cables and jumper wire
- Supports applications from voice to high-speed data
- Offers a reliable and economical high-density system
- Meets or exceeds the TIA specifications for Category 5e
- All components compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter 22), the KRONE Tool and the 788J1 5-pair tool
- UL listed
- CSA and Austel approved

Description	Pair Count	Height	Width	Figure	Part Number
Rack Mount Panel Kits	110Connect XC Cross-Connect	100	1U (1.75 in)		558635-1
		200	2U (3.50 in)	A	558637-1
		400	5U (8.75 in)		558639-1
	Cable Management Trough	–	2U (3.50 in)	B	406641-1

Category 5e Patch Panels

03

- For multimedia (no included connectivity) patch panels, see Chapter 15
- Meet or exceed TIA and ISO Category 5e/Class D component performance requirements
- Universal wiring – ports may be terminated to T568A or T568B
- Replacement labels and clear label covers for standard density panels are in Chapter 17
- 110Connect termination patch panels may be terminated using single-wire or 5-pair tools
- Angled and integrated cable management panels allow the elimination of horizontal cable management for higher rack densities and ease of cable dress
- 12-Port Mini Patch Panels mount vertically on included 89D bracket
- SL Series termination patch panels:
 - Feature individually replaceable ports
 - Are packaged unloaded with jacks bagged separately for termination with SL Series jack termination tool, see Chapter 22
- 48-port 1U patch panels:
 - Accommodate adhesive labels or icons for port identification
 - Are supplied with 48 specially developed jacks, bagged separately for termination with SL Series jack termination tool (Individual jacks included with these panels can not be purchased separately. Jacks supplied with panel assembly only.)



Port Count	Height	Width	Termination Style	Figure	Standard	Angled	Integrated Cable Management
12	10.00 in	2.3 in	SL Series	A	1479153-2	—	—
			110Connect	B	406390-1	—	—
	1U (1.75 in)	19.0 in	110Connect		406981-1	—	—
24	1U (1.75 in)	19.0 in	SL Series	C	1479154-2	1499602-2	—
			110Connect	D	406330-1	1499604-1	1479206-1
	1U (1.75 in)	19.0 in	Individual Jack*	E	1933457-1*	1933657-1*	—
48	2U (3.50 in)	19.0 in	SL Series	F	1479155-2	1499603-2	—
			110Connect	G	406331-1	1499605-1	—
	4U (7.00 in)	19.0 in	SL Series		1479156-2	—	—
96			110Connect		406332-1	—	—

*1U 48-port panel does not accept standard SL Series jacks. Included jacks are compatible with the SL Series termination tool.



04

Category 3 and 5 General Product Information.....	02-03
SL Series Category 3 Modular Jacks	04
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SL Series Toolless Category 3 Modular Jacks	05
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Category 3 25-Pair Patch Panels	11

25-Pair Conductor Color Code

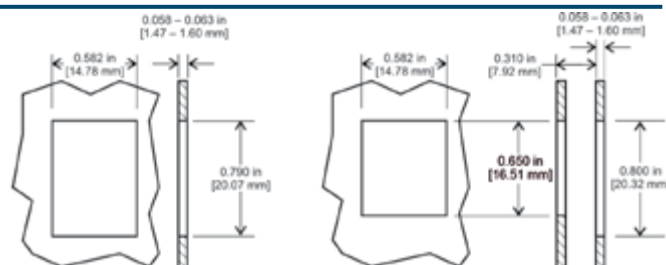
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Color Group	Pair	Conductor Jacket Color	Stripe Color
White (1)	1	Tip White	Blue
		Ring Blue	White
	2	Tip White	Orange
		Ring Orange	White
	3	Tip White	Green
		Ring Green	White
	4	Tip White	Brown
		Ring Brown	White
	5	Tip White	Slate
		Ring Slate	White
Red (2)	6	Tip Red	Blue
		Ring Blue	Red
	7	Tip Red	Orange
		Ring Orange	Red
	8	Tip Red	Green
		Ring Green	Red
Black (3)	9	Tip Red	Brown
		Ring Brown	Red
	10	Tip Red	Slate
		Ring Slate	Red
	11	Tip Black	Blue
		Ring Blue	Black
	12	Tip Black	Orange
		Ring Orange	Black
	13	Tip Black	Green
		Ring Green	Black
	14	Tip Black	Brown
		Ring Brown	Black
	15	Tip Black	Slate
		Ring Slate	Black

Color Group	Pair	Conductor Jacket Color	Stripe Color
Yellow (4)	16	Tip Yellow	Blue
		Ring Blue	Yellow
	17	Tip Yellow	Orange
		Ring Orange	Yellow
	18	Tip Yellow	Green
		Ring Green	Yellow
	19	Tip Yellow	Brown
		Ring Brown	Yellow
Violet (5)	20	Tip Yellow	Slate
		Ring Slate	Yellow
	21	Tip Violet	Blue
		Ring Blue	Violet
	22	Tip Violet	Orange
		Ring Orange	Violet
	23	Tip Violet	Green
		Ring Green	Violet
	24	Tip Violet	Brown
		Ring Brown	Violet
	25	Tip Violet	Slate
		Ring Slate	Violet

Suggested Modular Jack Cutouts

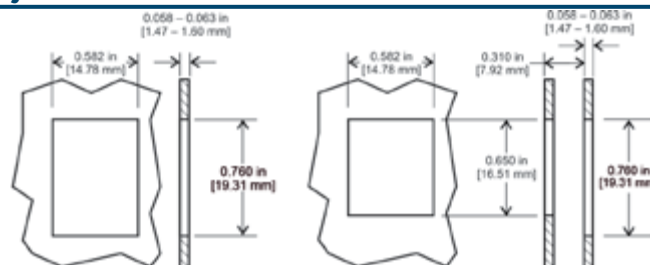
SL Series and 110Connect



Suggested Single Panel Cutout

Suggested Flush Mount Panel Application Cutout

Keystone



Suggested Single Panel Cutout

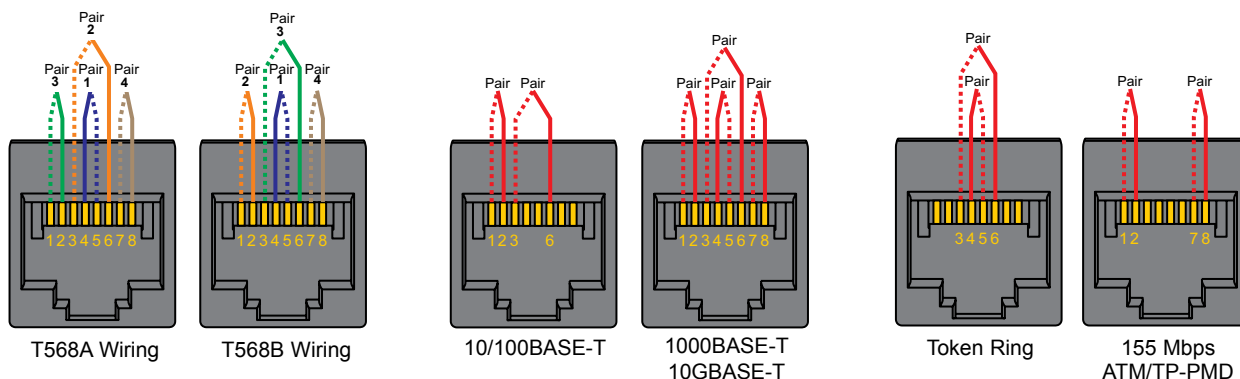
Suggested Flush Mount Panel Application Cutout

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AMP NETCONNECT Modular Jack Technical Reference

Modular Jack Mating Cycles	110 Contacts Terminations	Modular Jack Pull Force	Voltage	Operating Temperature	Approvals
750	200	20 lbs (89 N)	150 VAC max.	-40° — 70°C (-40° — 158°F)	UL Listed File Number: E81956

Application Wiring Diagrams for Modular Jacks

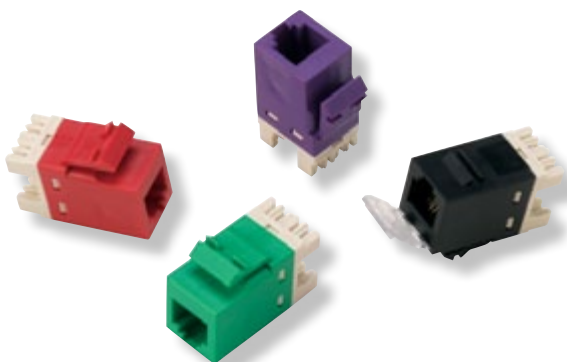


Die Set/Tool to Modular Plug Cross-Reference

Modular Plug	Individual Modular Plug Die Sets for Hand Tool 2-231652-0			
	1-231666-4	853400-1	853400-7	853400-8
554169	X	X	—	—
554170	X	X	—	—
554710	X	—	—	X
554720	X	X	—	—
554739	X	X	—	—
555042	X	—	—	X
555174	X	—	X	—
555175	X	—	X	—
555177	X	—	X	—
555417	X	X	—	—
555426	X	—	X	—
557315	X	X	—	—
569530	X	X	—	—
569532	X	X	—	—
569542	X	X	—	—
641337	X	—	—	X

SL Series Category 3 Modular Jacks

04



- Thin profile improves outlet density
- Available with integral dust covers
- 180° or 90° cable dress for easy termination
- UL Listed: E81956
- Unshielded, 6-Position RJ11c/RJ14c/RJ25c modular jacks for 1, 2 and 3-Pair applications
- Can be terminated with either SL Series modular jack termination tool (1725150-1) or standard 110 punch-down tools, see Chapter 22
- RoHS compliant
- The bulk option is 25 jacks per bag, 4 bags per carton

Color	Without Dust Cover	With Dust Cover	Without Dust Cover, Bulk Packaged
Almond	1375192-1	1375193-1	2-1375192-1
Black	1375192-2	1375193-2	2-1375192-2
White	1375192-3	1375193-3	2-1375192-3
Gray	1375192-4	1375193-4	2-1375192-4
Orange	1375192-5	1375193-5	2-1375192-5
Blue	1375192-6	1375193-6	2-1375192-6
Red	1375192-7	1375193-7	2-1375192-7
Yellow	1375192-8	1375193-8	2-1375192-8
Green	1375192-9	1375193-9	2-1375192-9
Violet	1-1375192-0	1-1375193-0	3-1375192-0
Electrical Ivory	1-1375192-1	1-1375193-1	3-1375192-1
Alpine White	1-1375192-3	1-1375193-3	3-1375192-3

Note: Colors are approximate and for reference only.

SL Series Modular Jack Strain Reliefs



- Provide strain relief for terminated cables in the Work Area
- For use with unshielded SL Series Modular Jacks only

Description	Used with	Color	Part Number
Strain Relief	Category 6, 5E, 3 SL Series Modular Jacks	Clear	1375157-1

SL Series Toolless Category 3 Modular Jacks



- Thin profile improves outlet density
- Terminate with common pliers
- Jacks available with integral dust covers
- UL Listed: E81956
- Unshielded, 6-Position RJ11c/ RJ14c/RJ25c Modular Jacks for 1, 2 and 3-Pair applications
- RoHS compliant

04

Color	Without Dust Cover	With Dust Cover
Almond	1116603-1	1339188-1
Black	1116603-2	1339188-2
White	1116603-3	1339188-3
Gray	1116603-4	1339188-4
Orange	1116603-5	1339188-5
Blue	1116603-6	1339188-6
Red	1116603-7	1339188-7
Yellow	1116603-8	1339188-8
Green	1116603-9	1339188-9
Violet	1-1116603-0	1-1339188-0
Electrical Ivory	1-1116603-1	1-1339188-1

Note: Colors are approximate and for reference only.

110Connect Category 3 Modular Jacks

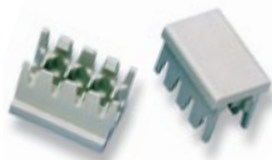


- Category 3 Jacks meet or exceed TIA and ISO requirements
- UL Listed: E81956
- Unshielded, 6-Position RJ11c/ RJ14c/RJ25c Modular Jacks for 1, 2 and 3-Pair applications
- Can be terminated with standard 110 punch-down tools, see Chapter 22
- RoHS compliant

Color	Part Number
Almond	406375-1
Black	406375-2
White	406375-3
Gray	406375-4
Orange	406375-5
Blue	406375-6
Red	406375-7
Yellow	406375-8
Green	406375-9
Violet	1-406375-0
Electrical Ivory	1-406375-1
Alpine White	1-406375-3

Note: Colors are approximate and for reference only.

110Connect Stuffer Caps



- Available as an alternative termination method
- Provide additional strain relief
- Each stuffer cap accommodates 2 pairs
- For 110Connect Modular Jacks only
- 50 stuffer caps per bag

Description	Used with	Part Number
110Connect Stuffer Caps	Category 5e, 3 110Connect Modular Jacks	569332-1

Keystone Category 3 Modular Couplers

04



- Compact couplers for two modular plugs
- Couplers snap into 0.585 x 0.765 inch rectangular faceplate cutouts
- Wired one-to-one

Description	Number of Positions	Figure	Part Number
Right-Angle Coupler	6	A	555049-1
	8		555051-1
	8 (Keyed)		555377-1
In-Line Coupler	6	B	555050-1
	8		555052-1
	8 (Keyed)		555376-1
	6 (MMJ/MMJ)		556625-1
	6 (MMJ/STD)		556627-1

Category 3 Modular Plugs



**8-Position,
Round, Standard**



**6-Position,
Round, Standard**



**6-Position,
Round, Long**



**6-Position,
Flat, Standard**



**8-Position,
Flat, Standard**



**Shielded
8-Position
Round, Standard**

- Accommodate conductors as listed
- RoHS compliant
- Molded with UL94V-0 rated plastic
- UL Listed: E81956
- For termination tooling, see Chapter 22
- Modular Plug to Die Set cross reference on page 3

Positions	Shielding	Keying	Cable Type	Cable Jacket O.D.in (mm)	Conductor Type	AWG	Insulation O.D. in (mm)	Body Type	Quantity Per Box	Part Number
6	Unshielded	Unkeyed	Round	0.180 (4.58) max.	Stranded	28-26	0.035 (0.89) max.	Standard	100*	5-554710-3
				0.195 (4.96) max.	Solid	26-24	0.029 (0.74) – 0.039 (0.99)	Long	100*	5-555177-3
			Flat Oval	0.090 (2.29) x	Stranded	28-26	0.039 (0.99) max.	Long	100*	5-555426-3
				0.260 (6.61) max.	Solid	26-24	0.029 (0.74) – 0.039 (0.99)	Standard	100*	5-641337-3
	Shielded	Unkeyed	Flat Oval	0.110 (2.79) x	Stranded	28-26	0.035 (0.89) – 0.039 (0.99)	Standard	100*	5-555042-3
			Round	0.270 (6.85) max.	Stranded	28-26	0.029 (0.74) – 0.039 (0.99)	Long	1000	5-555174-2
8	Unshielded	Keyed	Round	0.180 (4.58) max.	Stranded	28-26	0.029 (0.74) – 0.039 (0.99)	Long	100*	5-555175-3
		Unkeyed	Round	0.210 (5.33) max.	Stranded	28-26	0.029 (0.74) – 0.039 (0.99)	Standard	100*	5-554170-3
			Round	0.210 (5.33) max.	Stranded	28-26	0.029 (0.74) – 0.039 (0.99)	Standard	100*	5-554169-3
			Round	0.200 (5.08)	Solid	26-24	0.029 (0.74) – 0.039 (0.99)	Long	100*	5-557315-3
	Shielded	Unkeyed	Flat Oval	0.100 (2.54) x	Stranded	28-26	0.035 (0.89) – 0.039 (0.99)	Long	100*	5-554739-3
			Flat Oval	0.350 (8.89) max.	Solid	26-24	0.035 (0.89) – 0.039 (0.99)	Standard	100*	5-554720-3
			Round	0.200 (5.08)	Stranded	28-24	0.029 (0.74) – 0.039 (0.99)	Standard	100	5-569532-3
			Flat Oval	0.110 (2.79) x	Solid	26-24	0.029 (0.74) – 0.039 (0.99)	Standard	100	5-569530-3
			Flat Oval	0.355 (9.02) max.	Stranded	28-24	0.029 (0.74) – 0.039 (0.99)	Standard	100	5-569542-3

*Note: 10 Boxes per Carton

Modular Plug Boots

04



- For use with Category 3, 5 and 5e
- 8-position modular plugs
- Accept cables with a maximum diameter of 0.210 in (5.33 mm)

Color	Part Number
Black	569875-1
Almond	569875-2
Red	569875-3
Green	569875-4
Blue	569875-5
Yellow	569875-6
Orange	569875-7
White	569875-8
Violet	569875-9
Gray	1-569875-0

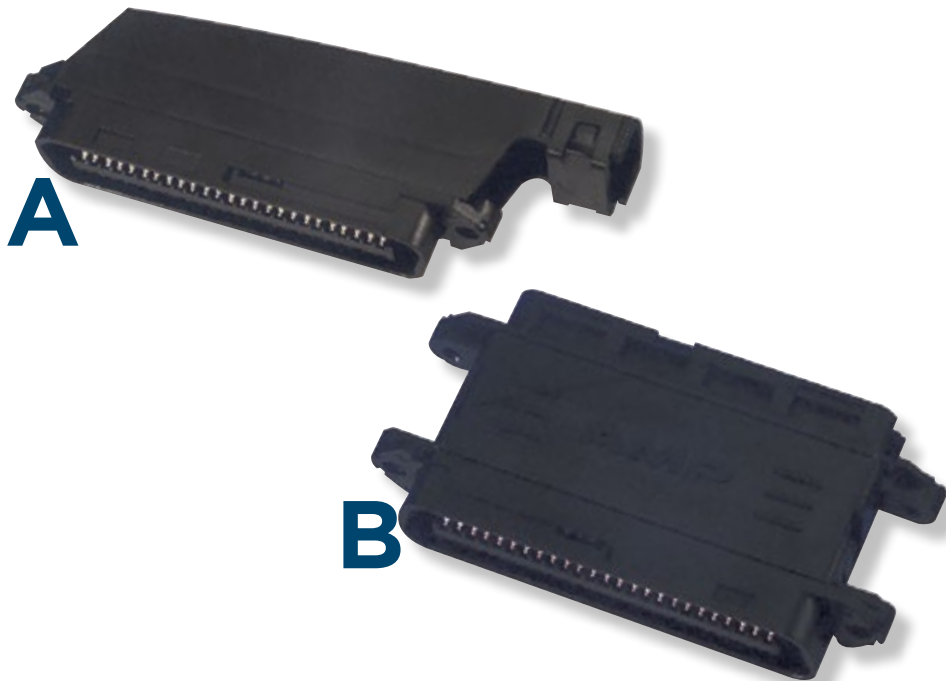
Note: Colors are approximate and for reference only.

External Strain Reliefs For Modular Plugs



- Metal strain relief that positively engages plug housing
- For PRO-CRIMPER III tool and die set, see Chapter 22
- For use with 8-position Category 3, 5 and 5e Modular Plugs only
- RoHS compliant

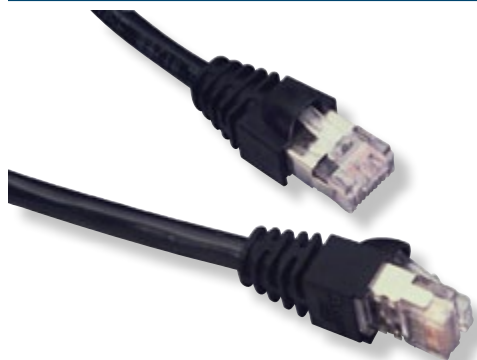
Description	Part Number
Use without Modular Plug Boots	558527-1
Use with Modular Plug Boots	558527-3



- Unshielded cable connectors (50-position) meet FCC requirements
- part 68 and RJ21 for standard telecommunications interface
- All unshielded cable-to-cable plug kits accept receptacles with integral latches
- Wear adapter (connector saver) – 50-position, plug-to-receptacle
- Plug-to-plug assembly – for mating cable ends with receptacle connectors installed
- Receptacle-to-receptacle assembly – for mating cable ends with plug connectors installed

Description	Connector Gender	Hardware	Color	Figure	Part Number
CHAMP Plug	Male Connector	Screwlock hardware, snap-on cable clamp	Black	A	5229912-1
			Gray		5229912-4
CHAMP Receptacle	Female Connector	CHAMP-LOK hardware, ratcheted cable clamp	Black		553913-1
			Black		5229913-1
		Screwlock hardware, snap-on cable clamp	Gray		5229913-4
			Gray		553912-1
CHAMP Adapters	Plug (Male) to Receptacle (Female) Wear Adapter	–	–		552705-1
	Plug (Male) to Plug (Male) Adapter	–	–	C	5554876-2
	Receptacle (Female) to Receptacle (Female) Adapter	–	–		5554875-2

Category 5 F/UTP Patch Cable Assembly



- Meets or exceeds Category 5 performance standards
- Shielded cable assemblies contain 4-Pair stranded 26 AWG conductors
- Non-Plenum (CM rated)
- Cable/Snagless Boot Color: Black
- Universal wiring (T568A/T568B)
- Lead-Free (no heavy metals)

04

Jacket Color	Length	Part Number
Black	2 ft [0.61 m]	557827-1
	4 ft [1.22 m]	557827-2
	6 ft [1.83 m]	557827-3
	8 ft [2.44 m]	557827-4
	10 ft [3.05 m]	557827-8
	12 ft [3.66 m]	557827-5
	16 ft [4.88 m]	557827-6
	20 ft [6.10 m]	557827-7
	50 ft [15.24 m]	1-557827-0
	75 ft [22.86 m]	557827-9

Ethernet Crossover Cable Assemblies

- Category 5 crossover cables are compatible with IEEE 802.3 10/100BASE-T
- For other lengths and wiring diagrams, see Customer Drawing
- Lead-Free (no heavy metals)

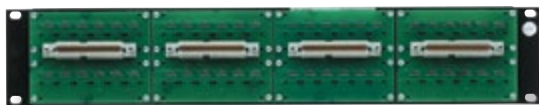
TIA/EIA Category	Cable/Boot Color	Length	Part Number
Category 5	Orange/Black	3 ft [0.91 m]	219153-1
		5 ft [1.52 m]	219153-3
		10 ft [3.05 m]	219153-4
		12 ft [3.66 m]	219153-2
		25 ft [7.62 m]	219153-5

Category 5, 10/100BASE-T, RJ21 (25-Pair) Patch Panel and Cable Assemblies

A
Front



A
Back



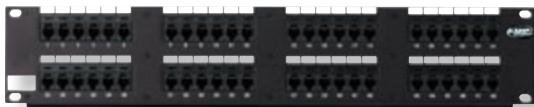
B

- Meets or exceeds TIA and ISO Category 5 component performance requirements
- Provides RJ45 breakouts from 10/100BASE-T switches and hubs that use the 25-pair telecommunications interface
- Compatible with CISCO hubs and switches
- Use with 25-pair plug to plug cable assemblies listed
- Cable assemblies are for use with this patch panel only
- 2U (3.50 in) x 19 in Patch Panel

Description	Figure	Length	Part Number
Category 5, 10/100BASE-T, 25-Pair Patch Panel	A	—	1116732-1
Left-hand Exit Cable Assembly	B	5 ft [1.52 m]	1116733-5
		7 ft [2.13 m]	1116733-7
		10 ft [3.05 m]	1-1116733-0
		15 ft [4.57 m]	1-1116733-5
Right-hand Exit Cable Assembly		5 ft [1.52 m]	1116734-5
		7 ft [2.13 m]	1116734-7
		10 ft [3.05 m]	1-1116734-0
		15 ft [4.57 m]	1-1116734-5

Category 3 Patch Panels

A
Front



A
Back



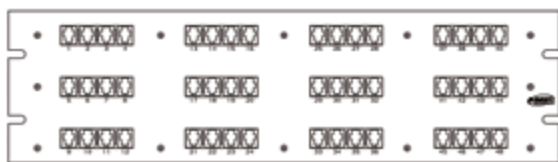
- Meets or exceeds TIA and ISO Category 3 component performance requirements
- Available in 2 and 3-pair for voice and low speed data applications
- Fit standard 19-inch racks

Description	Height	Wiring Pattern	Figure	Part Number
24-Port	1U (1.75 in)	RJ25C (3-Pair)	A	558257-1
		RJ14C (2-Pair)		557403-1
48-Port	2U (3.50 in)	RJ14C (2-Pair)		557411-1
96-Port	4U (7.00 in)	RJ14C (2-Pair)		557415-1

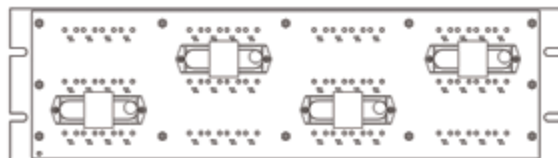
Category 3 25-Pair Patch Panels

04

A
Front



A
Back



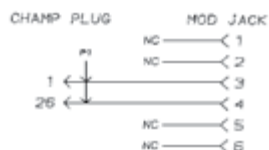
- Meets or exceeds TIA and ISO Category 3 component performance requirements
- Available in 1 through 4-pair for voice and low speed data applications
- 25-Pair connectors on the back of the patch panels are male (plugs)



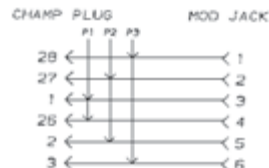
Front Detail



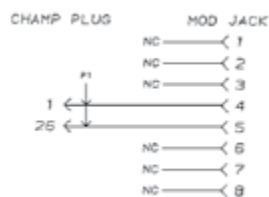
Back Detail



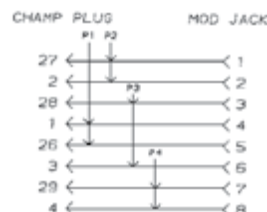
A. 1-Pair (6-Position)



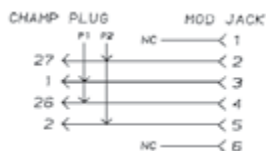
D. 3-Pair (6-Position)



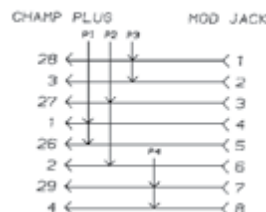
B. 1-Pair (8-Position)



E. 4-Pair (T568B)



C. 2-Pair (6-Position)



F. 4-Pair (T568A)

Port Count	Height	Width	Modular Jack Type	Active Pins	Wiring Diagram	Number of 25-Pair Plugs (Male)	Figure	Part Number
24	1U (1.75 in)	19 in	1-Pair (6-Pos.)	3&4	A	1		556189-1
			2-Pair (6-Pos.)	2-5	C	2		556183-1
			4-Pair (8-Pos.)	1-8	F	4		556180-1
			4-Pair (8-Pos.)	1-8	E	4		556186-1
48	3U (5.25 in)	19 in	1-Pair (8-Pos.)	4&5	B	2		555482-1
			1-Pair (6-Pos.)	3&4	A	2		555483-1
			2-Pair (6-Pos.)	2-5	C	4	A	555375-1
			3-Pair (6-Pos.)	1-6	D	6		555346-1
			4-Pair (8-Pos.)	1-8	E	8		555383-1

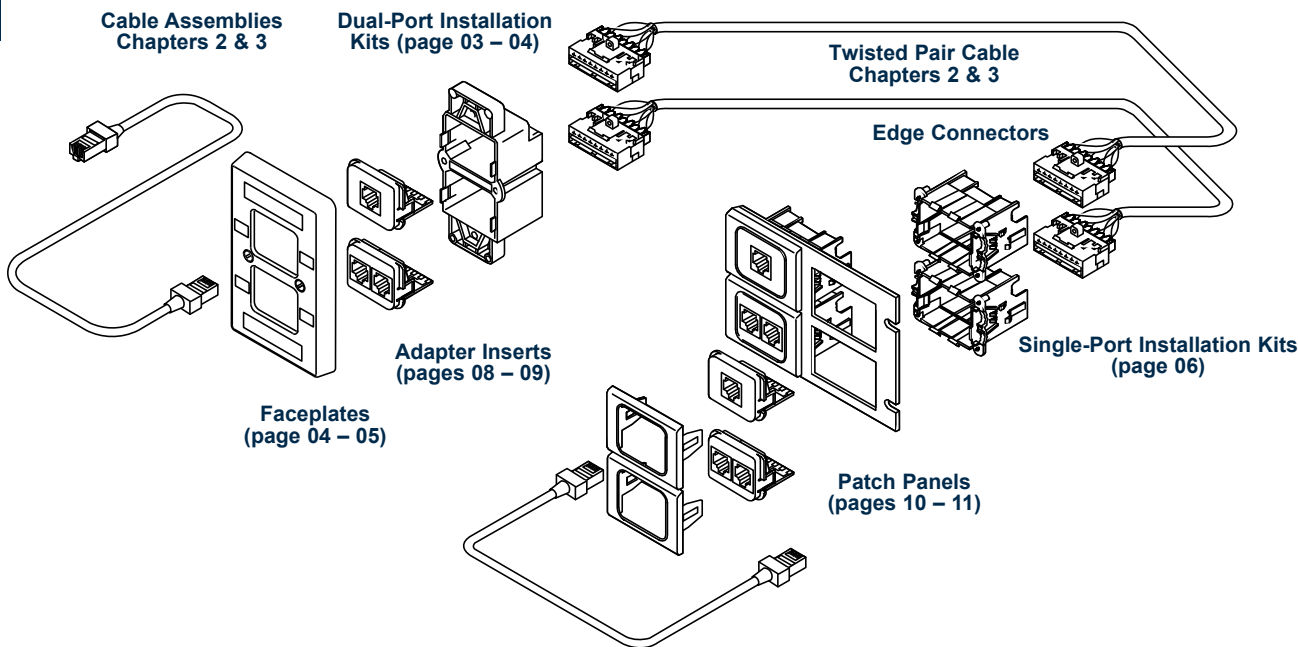
05

AMP Communications Outlet (ACO) General Product Information	02
ACO Dual Port Installation Kits	03
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AMP Communications Outlet (ACO) Information

05



The core of the ACO system is the installation kit which mounts into standard electrical boxes. Edge connectors in the rear of the installation kit are terminated to horizontal cabling. The edge connectors, in turn, accept pluggable inserts which snap into the edge connectors to provide the interface for equipment (phone, computer, printer, etc.).

This combination of card edge connectors and pluggable inserts provides a reconfigurable connector interface which doesn't require re-termination of the cable.

The inserts take care of providing the appropriate connector interface and pinout to match the equipment in use. When that equipment changes, the adapter insert can be replaced by simply removing the faceplate, snapping out the old insert and snapping in a new one, a process which takes about a minute.

Dual connector inserts also help to maximize cable usage through sheath-sharing, combining two applications, such as 100BASE-T, on one 4-pair cable.

How to Order an AMP Communications Outlet System

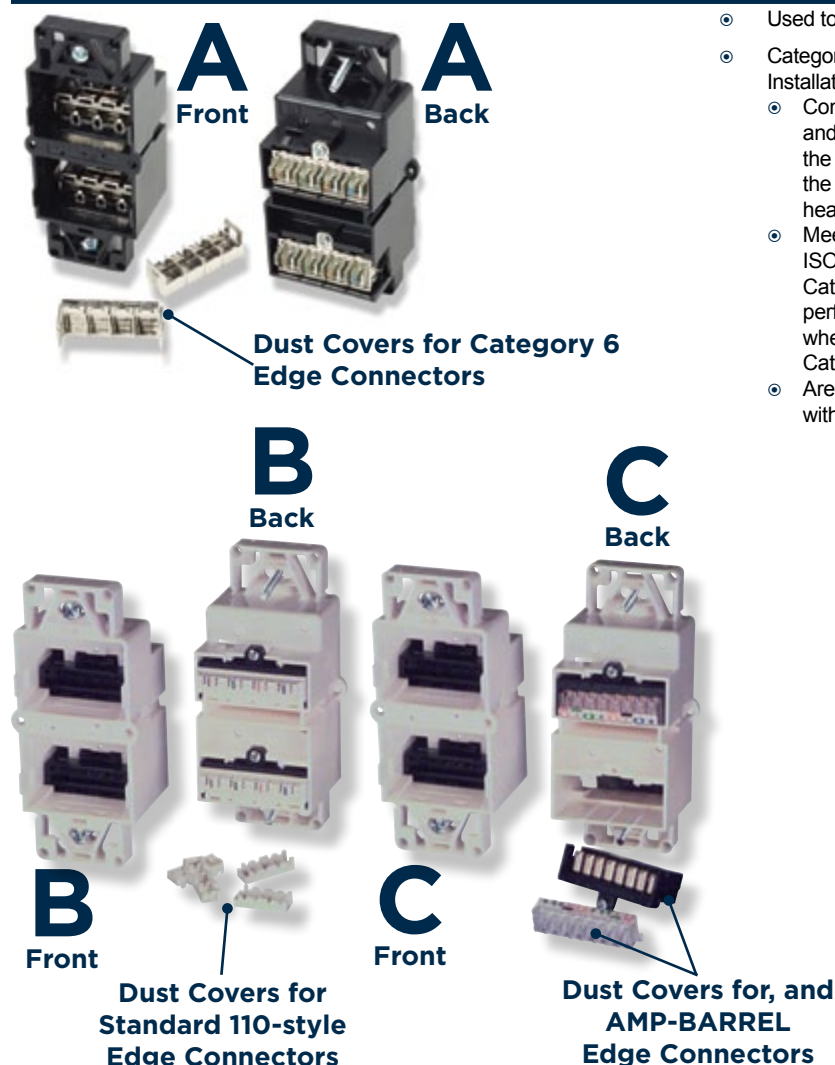
- Choose the appropriate installation kit to meet your cable (shielded or unshielded, Category 5e or Category 6) and mounting requirements:
 - Dual-port kits for fixed wall, Access
 - Floor workstation module and surface mounted applications
 - Single-port kits for modular furniture, AMP surface mount outlet and undercarpet applications
- Choose the appropriate inserts to match your applications:
 - Category 6 inserts (page 08)
 - Category 5e inserts (page 08)
 - Category 3 inserts (page 09)
 - 150 Ω STP inserts (page 09)

Make sure to order inserts for patch panels as well as workstation outlets.

- Choose the appropriate faceplate
- Choose the appropriate shielded or unshielded patch panel kit

ACO Dual Port Installation Kits

05

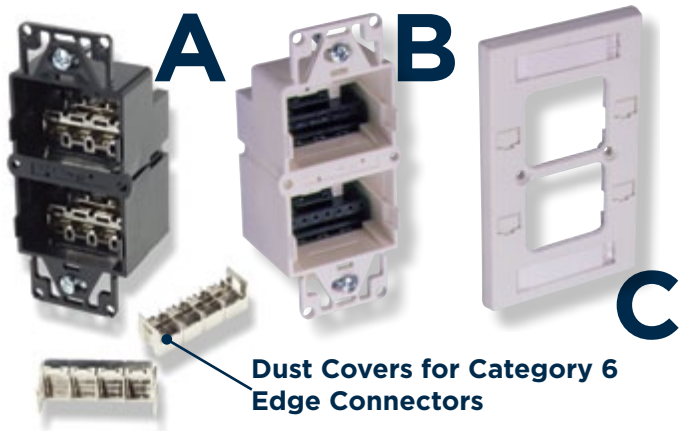


- Used to mount ACO Inserts
- Category 6 Dual-Port Installation Kits:
 - Combines the flexibility and adaptability of the ACO System with the performance and headroom of Category 6
 - Meet or exceed TIA and ISO requirements for Category 6 component performance requirements when combined with Category 6 Inserts
 - Are backwardly compatible with standard ACO Inserts
- Standard Dual-Port Installation Kits:
 - Both 110-Style and AMP-BARREL connectors provide Category 5e performance when combined with Category 5e inserts
 - Available in both shielded and unshielded kits
 - Unshielded kits include unshielded insert housing, and two edge connectors
 - Shielded kits include shielded insert housing, two edge connectors, ground shield, and shield clip/strain-relief
 - Unshielded kits are recommended for installation in 4 inches square x 2 ½ inches deep electrical boxes with standard 100 Ω UTP cable
 - Shielded kits are recommended for installation in 4 inches square x 2 ½ inches deep electrical boxes with shielded 100 Ω cable (110-Style edge connectors) or 150 Ω Type 1 cable (AMP-BARREL edge connectors)

Description		Edge Connector	Figure	Part Number
Category 6 Dual-Port Installation Kit	Unshielded	110-Style	A	1479306-1
Standard Dual-Port Installation Kit	Unshielded	110-Style	B	406091-1
		AMP-BARREL	C	406352-1
	Shielded	AMP-BARREL		555601-1

ACO Low Profile Dual-Port Installation Kits and Faceplates

05



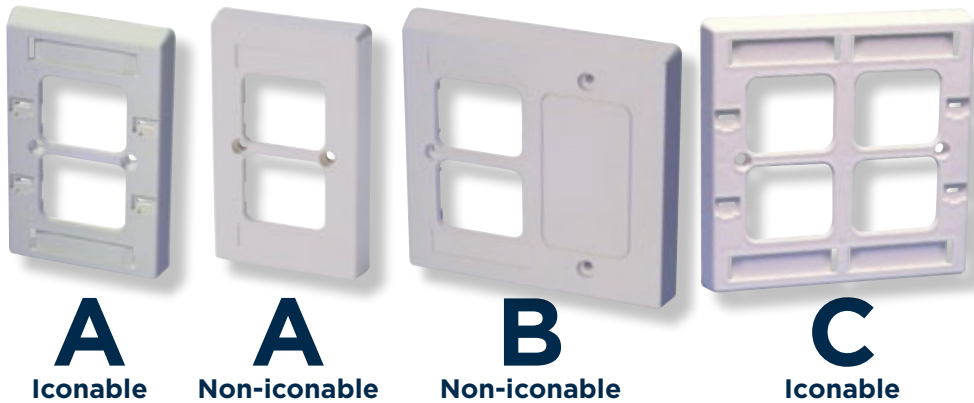
Dust Covers for Category 6 Edge Connectors

- Used to mount ACO Inserts in flush mount configurations
- Faceplates accept icons and labels for easy identification
- Installation kits include unshielded insert housing and two edge connectors
- Recommended for installation in 4 inches square x 2 ½ inches deep electrical boxes with standard 100 Ω UTP cable
- Category 6 Dual-Port Installation Kits
 - Meet or exceed TIA and ISO requirements for Category 6 component performance requirements when combined with Category 6 Inserts
 - Are backwardly compatible with standard ACO Inserts
- Standard Dual-Port Installation Kits
 - Provide Category 5e performance when combined with Category 5e inserts
- Icons and labels in Chapter 17
- ACO Inserts sold separately (see pages 8 and 9)

Description		Edge Connector	Shielding	Color	Figure	Part Number
Dual-Port, Low Profile Installation Kit*	Category 6	110-Style	Unshielded	Black	A	1479307-1
	Standard	110-Style	Unshielded	White	B	406090-1
Low Profile Faceplate	Single Gang	–	–	Almond	C	406089-1
				Black		406089-3
				Gray		406089-4
				White		406089-5
				Electrical Ivory		406089-6
	Double Gang	–	–	Almond		1933010-1
				White		1933010-5

*NOTE: Dual-port low profile installation kits are not seen when faceplates are installed.

ACO Faceplate Kits



- Tyco Electronics recommends that a double gang box be used in all initial installations to allow for future expansion – a double gang faceplate with one side blank is initially installed and is replaced with a double gang faceplate as additional outlets are needed
- Icons and labels in Chapter 17
- ACO Inserts and installation kits sold separately (see pages 3 and 4)

Description	Accepts	Color	Figure	Iconable	Non-iconable
ACO Dual-Port Faceplate Kit	Single Gang One Dual-port Installation Kit	Almond	A	558510-1	555650-1
		Black		558510-3	555650-3
		Gray		558510-4	555650-4
		White		558510-5	555650-5
		Electrical Ivory		558510-6	555650-6
		Almond	B	–	556340-1
	Double Gang One Dual-port Installation Kit (One Side Blank) Two Dual-port Installation Kits	White		–	556340-5
		Electrical Ivory		–	556340-6
		Almond	C	558512-1*	555670-1*
		Black		558512-3*	–
		Gray		558512-4*	–
		White		558512-5*	555670-5*
		Electrical Ivory		558512-6*	555670-6*

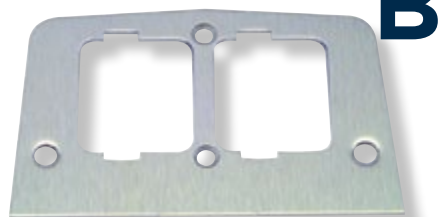
*Note: Requires removal of inside mounting ears from Installation kits (shielded kits only)

SEMTRON Faceplates for ACO Products

05



A



B

- Semtron, Inc., manufactures single gang faceplates for ACO products in stainless steel and brass
- Allow the standard installation kits (555601) to be mounted in Walkerdut 500/501 pedestal series floor fittings and HUBBELL LO-CON above-floor model service fittings FR-15/35/355/55 are available
- These and other custom faceplates are available directly from:
Semtron, Inc.
G-6465 Corunna Rd.
Flint, MI 48504
Phone: 1-800-732-9080
Fax: 810-732-9665
Email: semtron@semtron.com
www.semtron.com

Description	Manufacturer	For Use With	Figure	Part Number
Stainless Steel Faceplates	SEMTRON, Inc.	HUBBELL "LO-CON" Service Fittings	A	HUBACO
		WALKER 500/501 Floor Fittings	B	B500ACO

ACO Double Gang Recessed Box & Accessories

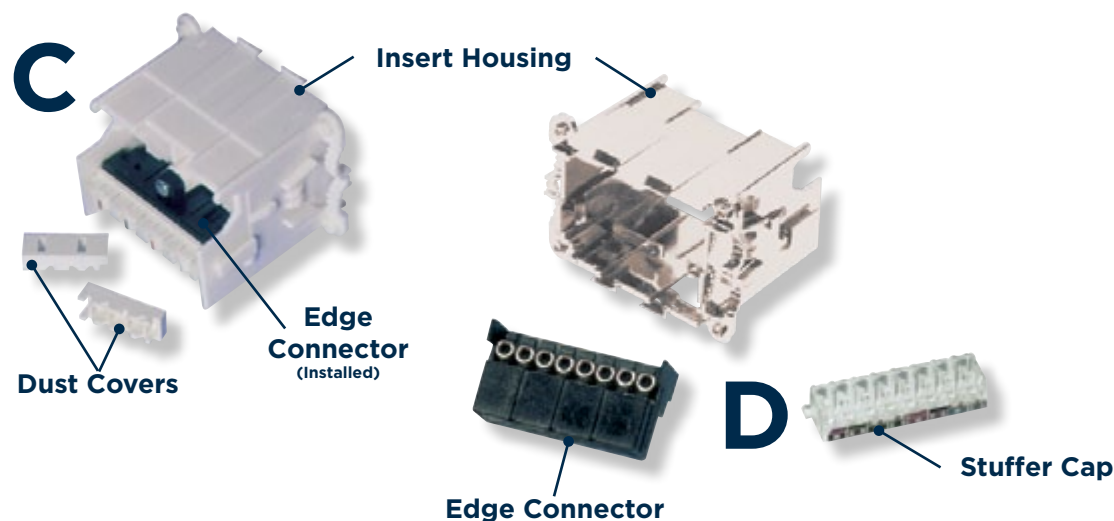
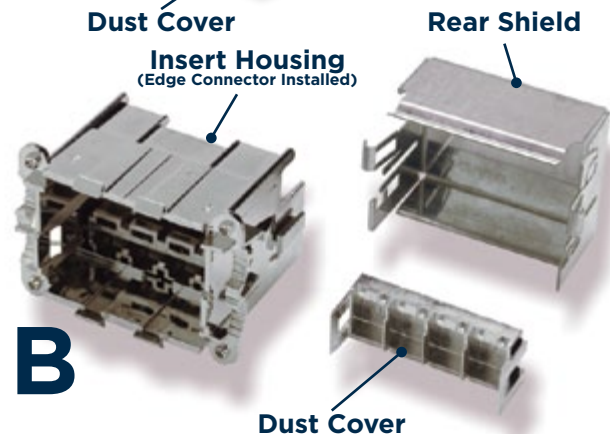
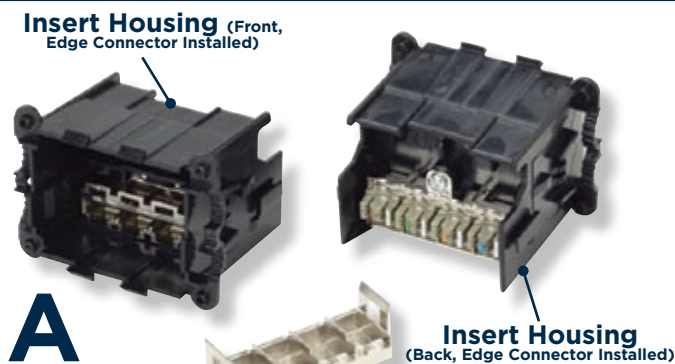


- Recessed box with mounting bracket and four screws
- Mounts directly to drywall or paneling (1/4 to 5/8 inch thick)
- Accepts two dual-port installation kits in this chapter
- Optional snap-on cover
- Faceplates are ordered separately

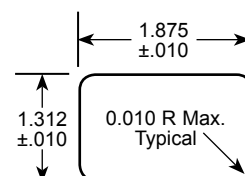
Description	Part Number
Double Gang Recessed Box with mounting bracket	556598-1

ACO Single-Port Installation Kits

05



- Available in both shielded and unshielded kits, includes edge connectors
- Category 6 ACO installation kits:
 - Combines the flexibility and adaptability of the ACO System with the performance and headroom of Category 6
 - Meet or exceed TIA and ISO requirements for Category 6 component performance requirements
 - Are backwardly compatible with standard ACO Inserts
- Standard installation kits with either 110-Style or AMP-BARREL connectors provide Category 5e performance when combined with Category 5e inserts
- Used to mount ACO inserts sold separately
- Single-port module may be snapped into 0.040 – 0.090 inch thick panel with a minimum of 1 % inch clearance behind the panel
- Optional screw mounting capability is provided for thicker panels
- Modular furniture faceplate kit adapts the single-port module for installation in standard modular furniture raceway knockouts
- Panel mount faceplates are available for custom applications
- Unshielded kits includes unshielded insert housing, edge connector, and dust cover/strain-relief
- Shielded kits includes shielded insert housing, edge connector, rear shield, shield clip, and stuffer cap/dust cover/strain-relief

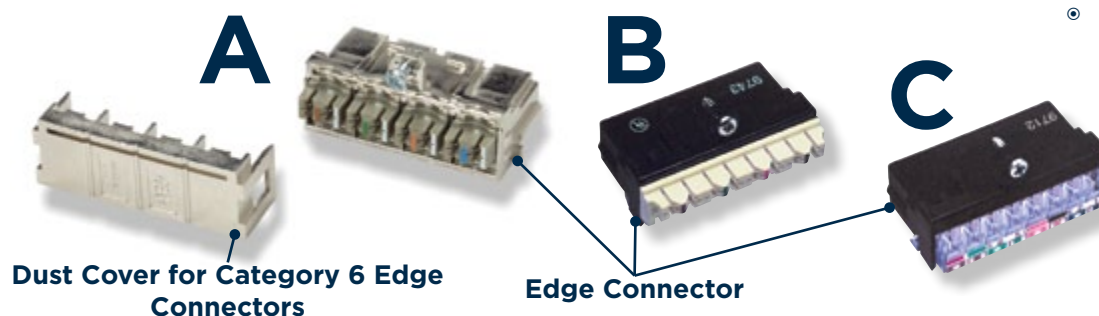


Recommended Panel Cutout

Description	Edge Connector	Shielding	Figure	Part Number
Category 6, Single Port Installation Kit	110-Style	Unshielded	A	1479317-1
		Shielded	B	1479318-1
Standard, Single-Port Installation Kit	110-Style	Unshielded	C	406360-1
	AMP-BARREL	Unshielded	D	406389-1
	110-Style	Shielded		406361-1

ACO Edge Connector Assembly

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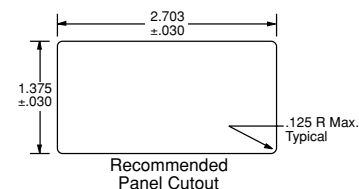
- Replacement ACO edge connectors for use with ACO installation kits and ACO inserts

Description		Termination	Figure	Part Number
Edge Connector Kit	Category 6	110-Style	A	1479305-1
	Category 5e	110-Style	B	406350-1
		AMP-BARREL	C	406397-1

ACO Single-Port Faceplates For Modular Furniture



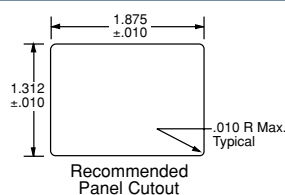
- Used to mount single-port module in a standard modular furniture raceway knockout
- Kit includes bezel and faceplate
- Requires 1 ⁷/₁₆ inch clearance behind the raceway



Description	Color	Part Number
ACO Single-port Faceplates for Modular Furniture	Almond	556679-1
	Black	556679-3

NOTE: Many furniture panels may not provide the required depth when optional power systems are installed.

ACO Single-Port Faceplates For Panel Mount



- This outlet may be used with undercarpet fitting 555535 and for custom mount applications

Description	Color	Part Number
ACO Single-Port Faceplates For Panel Mount	Almond	556680-1
	Black	556680-3
	White	556680-5

NOTE: Many furniture panels may not provide the required depth when optional power systems are installed.

ACO Inserts for 100 Ω cable

05

- Inserts comply with requirements of TIA/EIA-568-C and ISO 11801:2002
- Dual Category 5e inserts allow the combination of two applications on one 4-pair cable
- Two 10BASE-T or two 16 Mbps token ring links may safely be combined on a single 4-pair cable within certain design parameters
- When combined with AMP NETCONNECT Category 5e cable, dual Category 5e inserts have been verified to support dual transmissions up to 100BASE-T and/or 155 Mbps ATM
- The simplest way to test and certify an ACO installation that will use dual inserts is to use single 4-pair inserts for testing prior to installing the dual inserts



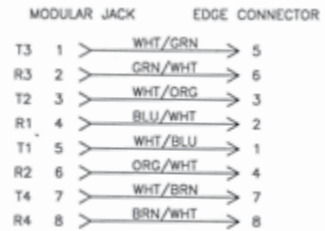
A



C



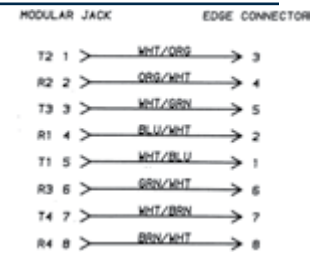
D



B



E



Description	Wiring	Shielding	Figure	Almond	Black	Gray	White	Electrical Ivory
Category 6 Inserts for 100 Ohm cable	Single T568A	Unshielded/ Shielded	A	1644031-1*	1644031-3*	—	1644031-5*	—
	Single T568B	Unshielded/ Shielded	B	1644027-1*	1644027-3*	—	1644027-5*	—
Category 5e Inserts for 100 Ohm cable	Single T568A	Unshielded	C	558908-1	558908-3	558908-4	558908-5	558908-6
		Shielded	D	406956-1	406956-3	406956-4	406956-5	406956-6
	Single T568B	Unshielded	E	558909-1	558909-3	558909-4	558909-5	558909-6

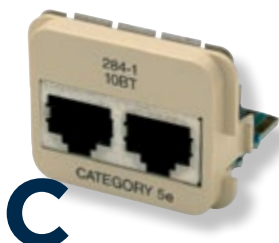
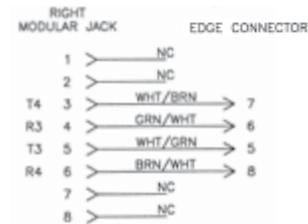
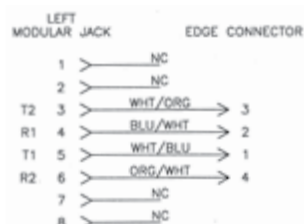
*Note: For use with Category 6 ACO Installation Kits only.

ACO Inserts for 100 Ω cable

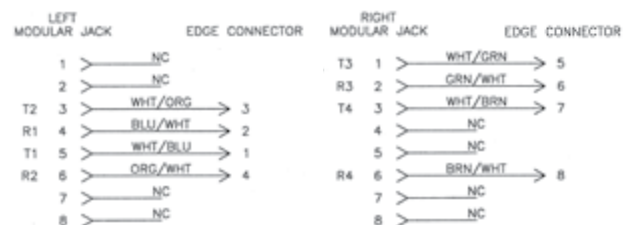
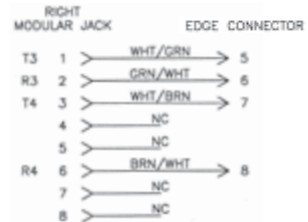
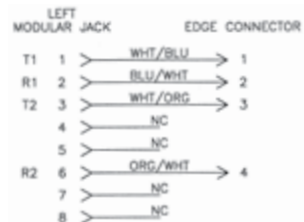
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B



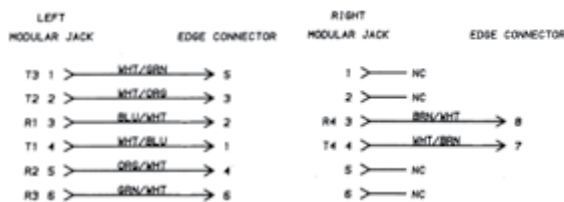
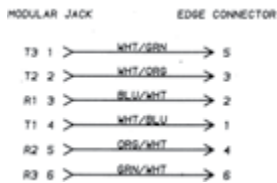
D



Description	Wiring	Shielding	Figure	Almond	Black	Gray	White	Electrical Ivory
Category 5e Inserts for 100 Ohm cable	Dual Token Ring	Unshielded	A	558907-1	558907-3	558907-4	558907-5	558907-6
		Shielded	B	406957-1	406957-3	406957-4	406957-5	406957-6
	Dual 10/100BASE-T	Unshielded	C	557280-1	557280-3	557280-4	557280-5	557280-6
		Shielded	D	557284-1	557284-3	557284-4	557284-5	557284-6
	Single Token Ring & Single 10/100BASE-T	Unshielded	E	557260-1	557260-3	557260-4	557260-5	557260-6

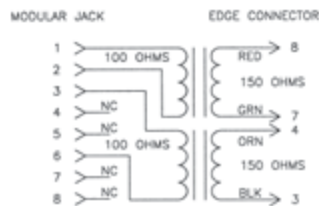
AMP Communications Outlet Inserts for 100 Ω cable

05



Description	Wiring	Shielding	Figure	Almond	Black	Gray	White	Electrical Ivory
6-Position Inserts for 100 Ohm cable	Single RJ11/RJ14/RJ25 Compatible	Unshielded	A	555611-1	—	—	—	—
	Dual (2-Pair/2-Pair)	Unshielded	B	555614-1	555614-3	555614-4	555614-5	555614-6
	Dual (3-Pair/1-Pair)	Unshielded	C	555617-1	—	—	—	555617-6
Blank Insert	—	—	D	555644-1	555644-3	555644-5	555644-9	1-555644-1
F-Connector Insert	—	—	E	555645-1	555645-3	555645-4	555645-5	555645-6

ACO Inserts for 150 Ohm, 2-Pair, Shielded Cable



- 100 to 150 Ω impedance matching insert is used to allow 10/100BASE-T to operate on Type-1 cable

Description	Wiring	Shielding	Figure	Part Number
100:150 Ohm Impedance Matching, 8-Position Modular Jack	10/100BASE-T	Shielded	A	558912-1

ACO Single-Port Patch Panel Kits, Preloaded

05



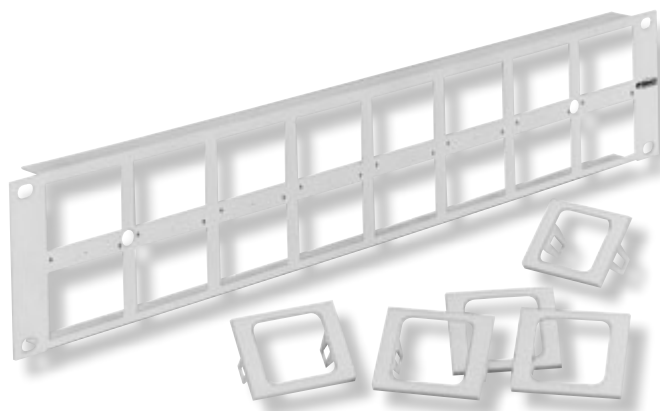
NOTE: Inserts sold separately

- ACO Inserts sold separately (see pages 8 and 9)
- Includes unshielded single-port installation kits
- Provides flexibility and adaptability
- For each port, use an adapter insert identical to the outlet insert
- Eliminates wiring errors and provides transparent migration between applications
- Each kit contains a panel with insert housings installed, edge connectors, and mounting hardware
- Fits standard 19 inch racks

Insert Port Count	Height	Included Edge Connector	Part Number
16	2U (3.50 in)	Unshielded, Cat 5e 110-style Termination	406363-1
32	4U (7.00 in)	Unshielded, Cat 5e 110-style Termination	406365-1

NOTE: 110Connect edge connectors provide Category 5e performance when combined with Category 5e inserts.

ACO Single-Port Patch Panel Kits, Unloaded



- ACO inserts sold separately (see pages 8 and 9)
- Provide flexibility and adaptability
- Allow construction of unshielded or mixed (shielded/unshielded) panels
- Each kit contains a panel, faceplates, mounting hardware and isolation bushings
- Single-port installation kits purchased separately (see page 6)
- Fits standard 19 inch racks

Insert Port Count	Height	Part Number
16	2U (3.50 in)	556245-1
32	4U (7.00 in)	556246-1

This image shows a full page of blank graph paper. The grid consists of thin, light gray horizontal and vertical lines that intersect to form small squares across the entire surface. There are no margins, text, or other markings on the paper.



06

Faceplate/Outlet, Jack and Insert Twisted Pair Compatibility List ..02 – 03	
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Stainless Steel Faceplates from Semtron	06
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Faceplates for Mounting Straps	07
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HIDEAWAY Multimedia Outlets	08
HIDEAWAY Multimedia Outlet Accessories	08
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Faceplate/Outlet, Jack and Insert Twisted Pair Compatibility List

06

		SL Series Unshielded Modular Jacks	SL Series Shielded Modular Jacks	XG Category 6 AMP-TWIST Modular Jack	SL Series Multimedia Jacks	SL Series Multimedia Inserts	SL Series Multimedia Modules	SL Series Modules	110Connect Unshielded Modular Jacks	110Connect Shielded Modular Jacks
SL Series Modules	1116409	X	X	X	X	X	—	—	X	—
	1116406	X	X	X	X	X	—	—	X	—
	1116408	X	—	—	X	X	—	—	—	—
SL Series Faceplates	1339118	—	—	—	—	—	X	X	—	—
	1339119	—	—	—	—	—	X	X	—	—
	1479486	—	—	—	—	—	X	X	—	—
Faceplates	2111008	X	X	X	X	X	—	—	X	X
	2111009	X	X	X	X	X	—	—	X	X
	2111010	X	X	X	X	X	—	—	X	X
	2111011	X	X	X	X	X	—	—	X	X
	2111203	X	X	X	X	X	—	—	X	X
	2111012	X	X	X	X	X	—	—	X	X
	2111013	X	X	X	X	X	—	—	X	X
	2111014	X	X	X	X	X	—	—	X	X
	2111015	X	X	X	X	X	—	—	X	X
	2111021	X	X	X	X	X	—	—	X	X
	2111022	X	X	X	X	X	—	—	X	X
	2111023	X	X	X	X	X	—	—	X	X
	2111024	X	X	X	X	X	—	—	X	X
	2111025	X	X	X	X	X	—	—	X	X
Angled Faceplates	1375155	X	X	X	X	X	—	—	X	X
	406185	X	X	X	X	X	—	—	X	X
Wall Mount Telephone Faceplate	1479152	X	X	X	X	X	—	—	X	X
Stainless Steel Faceplates from Semtron	1FM-ØE-AMP-PHONE	X	X	X	X	—	—	—	X	X
	1FM-ØØE-AMP	X	X	X	X	—	—	—	X	X
	1FM-(4)ØE-AMP	X	X	X	X	—	—	—	X	X
	1FM-(6)ØE-AMP	X	X	X	X	—	—	—	X	X
	1FM-ØE-AMP-LAB	X	X	X	X	—	—	—	X	X
	1FM-ØØE-AMP-LAB	X	X	X	X	—	—	—	X	X
	1FM-(3)ØE-AMP-LAB	X	X	X	X	—	—	—	X	X
	1FM-(4)ØE-AMP-LAB	X	X	X	X	—	—	—	X	X
	1FM-(6)ØE-AMP-LAB	X	X	X	X	—	—	—	X	X
	2FM-DØØE-AMP	X	X	X	X	—	—	—	X	X
	2FM-D(4)ØE-AMP	X	X	X	X	—	—	—	X	X
	2FM-D(6)ØE-AMP	X	X	X	X	—	—	—	X	X
	2FM-(6)ØE-AMP-LAB	X	X	X	X	—	—	—	X	X
	2FM-(12)ØE-AMP-LAB	X	X	X	X	—	—	—	X	X
Mounting Straps	1116618	X	X	X	X	X	—	—	X	X
	1339120	X	X	X	X	X	—	—	—	—
	1479784	X	X	X	X	X	—	—	X	X
	1116616	X	X	X	X	X	—	—	X	X
	1479504	X	X	X	X	X	—	—	—	—

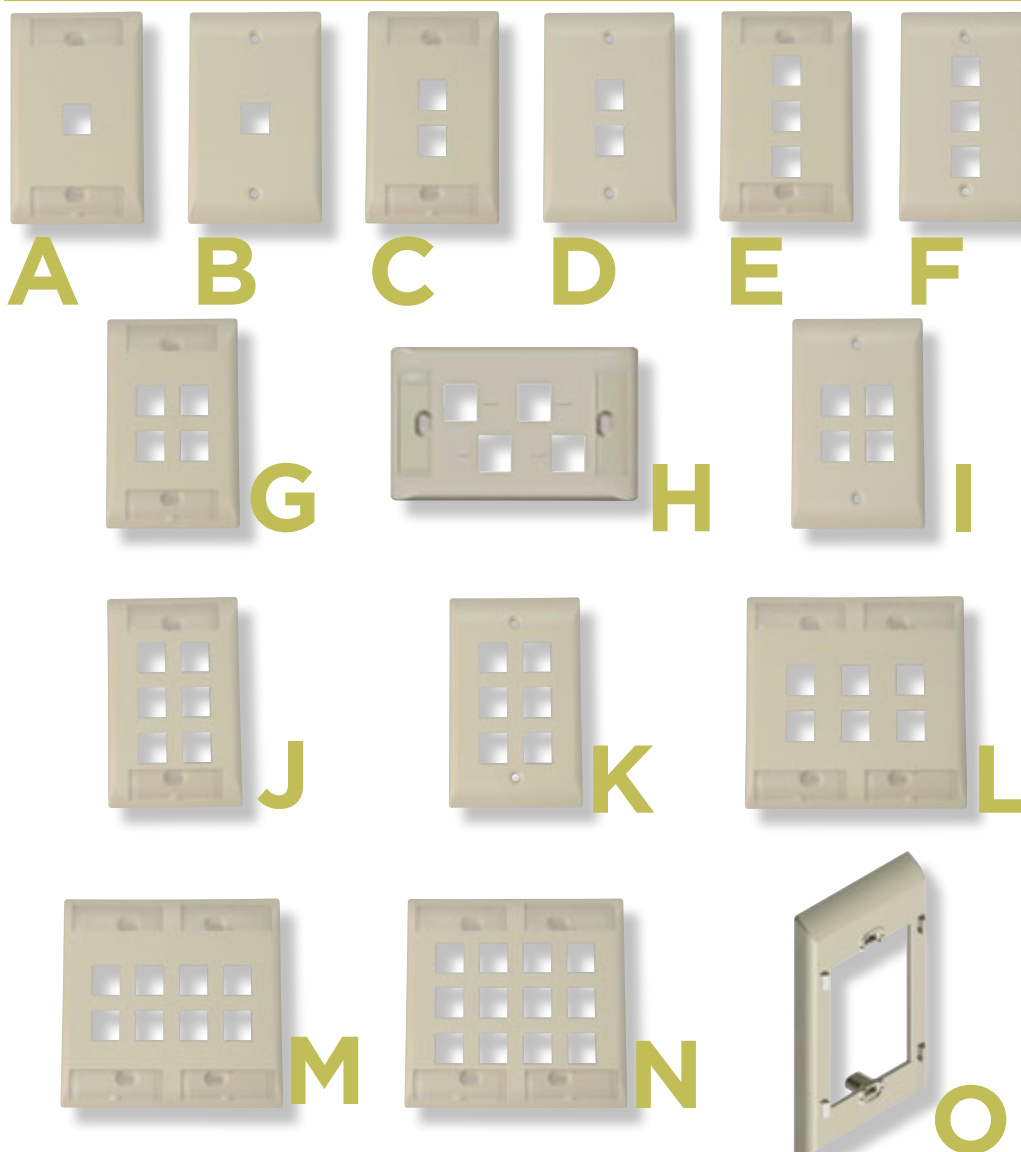
Faceplate/Outlet, Jack and Insert Twisted Pair Compatibility List (continued)

06

		SL Series Unshielded Modular Jacks	SL Series Shielded Modular Jacks	XG Category 6 AMP-TWIST Modular Jack	SL Series Multimedia Jacks	SL Series Multimedia Inserts	SL Series Multimedia Modules	SL Series Modules	110Connect Unshielded Modular Jacks	110Connect Shielded Modular Jacks
HIDEOUT Outlet	503999	X	X	X	X	X	—	—	X	—
	503997	X	X	X	X	X	—	—	X	—
	503998	X	X	X	X	X	—	—	X	—
HIDEAWAY Multimedia Outlets	1479815	X	—	—	X	X	—	—	—	—
	1479946	X	X	X	X	X	—	—	—	—
Multimedia Security Outlet	1116535	X	X	X	X	X	—	—	X	X
12-Port Universal Office Box	1479358	X	X	X	X	X	—	—	X	X
Modular Jack Boxes	1116697	X	—	—	—	—	—	—	X	—
	1116698	X	—	—	—	—	—	—	X	—
Surface Mount Modules	1933668	X	X	X	X	X	—	—	X	X
	1933671	X	X	X	X	X	—	—	X	X
	1933674	X	X	X	X	X	—	—	—	—
WIREMOLD Raceway Faceplates	1375050	X	X	X	X	X	—	—	X	X
	1375049	X	X	X	X	X	—	—	—	—
WIREMOLD 2A Inserts	CM2-U2AMP-XX	X	X	X	X	—	—	—	—	—
AFWM Flush Faceplates	569916	X	X	—	X	—	—	—	X	—
	569917	X	X	—	X	—	—	—	X	X
	1116695	X	X	—	X	—	—	—	X	X
FLEX-MODE Modular Furniture Faceplates Kits	1933134	X	X	X	X	X	—	—	—	—
	558106	X	X	X	X	X	—	—	X	X
	558107	X	X	X	X	X	—	—	X	X
SL Series Furniture Outlets	1375005	X	—	—	X	X	—	—	—	—
	1375006	X	—	—	X	X	—	—	—	—
Flush Faceplate for Herman Miller Furniture	558357	X	X	X	X	X	—	—	X	—
Standard Faceplates for Herman Miller Furniture	569127	X	X	X	X	—	—	—	X	—
	558191	X	X	X	X	—	—	—	X	—

Faceplates and Accessories

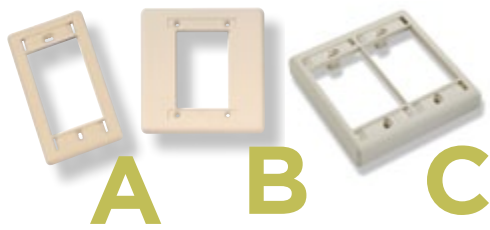
06



- Accepts all AMP-TWIST jacks, SL Series jacks, 110Connect jacks, MT-RJ outlet jacks and SL Series inserts
- Single gang dimensions:
 - 2.75 in [69.85 mm] x
 - 4.5 in [114.30 mm] x
 - 0.22 in [5.59 mm]
- Double gang dimensions:
 - 4.56 in [115.82 mm] x
 - 4.5 in [114.30 mm] x
 - 0.22 in [5.59 mm]
- Models available with and without labeling options
- Label areas with integrated, hinged covers
- Mold-over icon and leveling (for icons see Chapter 17)
- Improved label viewing area is larger with integrated, convex label covers that flip down and snap in place
- Larger radius on the faceplate edge and the convex shape of the label covers allow labels to be more easily viewed from above when faceplates are behind furniture
- Extender kits are used to add 0.5 inches [12.7 mm] of space between the mounting surface and the faceplate
- Extender kit dimensions:
 - 5.21 in [132.33 mm] x
 - 2.89 in [73.50 mm] x
 - 0.50 in [12.70 mm]

Port Count	Footprint	Integrated Labeling Options	Orientation	Figure	Part Number					
					Almond	Black	White	Gray	Electrical Ivory	Alpine White
1	Single Gang	Label Covers and Icons	Vertical	A	2111008-1	2111008-2	2111008-3	2111008-4	1-2111008-1	1-2111008-3
		None	Vertical	B	2111021-1	2111021-2	2111021-3	2111021-4	1-2111021-1	1-2111021-3
2	Single Gang	Label Covers and Icons	Vertical	C	2111009-1	2111009-2	2111009-3	2111009-4	1-2111009-1	1-2111009-3
		None	Vertical	D	2111022-1	2111022-2	2111022-3	2111022-4	1-2111022-1	1-2111022-3
3	Single Gang	Label Covers and Icons	Vertical	E	2111010-1	2111010-2	2111010-3	2111010-4	1-2111010-1	1-2111010-3
		None	Vertical	F	2111023-1	2111023-2	2111023-3	2111023-4	1-2111023-1	1-2111023-3
4	Single Gang	Label Covers and Icons	Vertical	G	2111011-1	2111011-2	2111011-3	2111011-4	1-2111011-1	1-2111011-3
			Horizontal	H	2111203-1	2111203-2	2111203-3	2111203-4	1-2111203-1	1-2111203-3
		None	Vertical	I	2111024-1	2111024-2	2111024-3	2111024-4	1-2111024-1	1-2111024-3
6	Single Gang	Label Covers and Icons	Vertical	J	2111012-1	2111012-2	2111012-3	2111012-4	1-2111012-1	1-2111012-3
		None	Vertical	K	2111025-1	2111025-2	2111025-3	2111025-4	1-2111025-1	1-2111025-3
	Double Gang	Label Covers and Icons	Vertical	L	2111013-1	2111013-2	2111013-3	2111013-4	1-2111013-1	1-2111013-3
8	Double Gang	Label Covers and Icons	Vertical	M	2111014-1	2111014-2	2111014-3	2111014-4	1-2111014-1	1-2111014-3
12	Double Gang	Label Covers and Icons	Vertical	N	2111015-1	2111015-2	2111015-3	2111015-4	1-2111015-1	1-2111015-3
Extender Kit				O	2111201-1	2111201-2	2111201-3	2111201-4	1-2111201-1	1-2111201-3

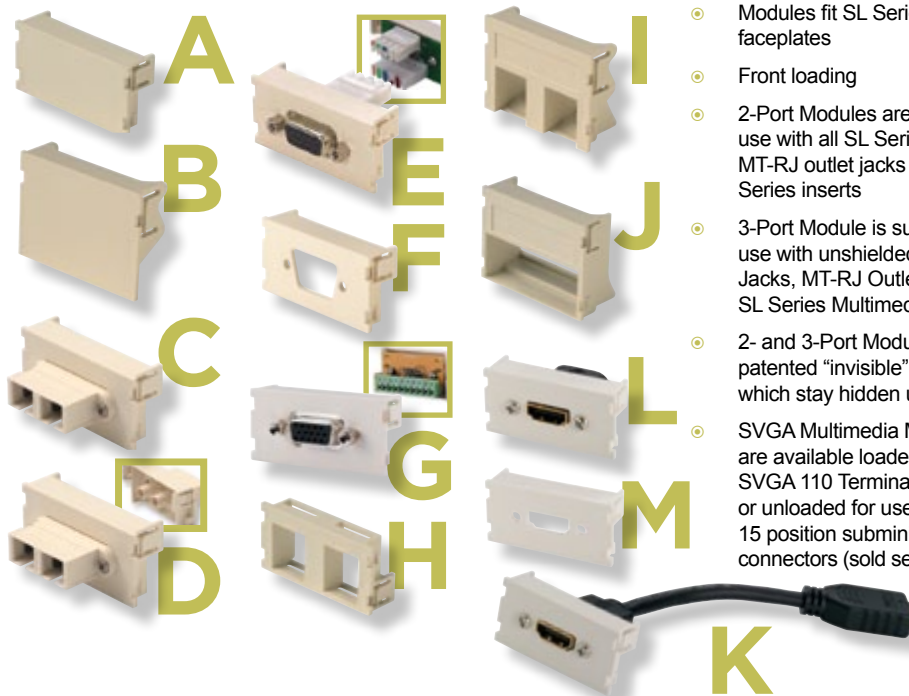
SL Series Faceplates



- Single gang and double gang, single-sided faceplates accept three 1 Unit or two 1.5 Unit SL Series Modules
- Double gang, double-sided faceplates accept three 1 Unit or two 1.5 Unit SL Series Modules on each side
- Front-loading modules eliminate need to remove faceplates from wall for changes or repairs
- Double gang, double-sided SL Series faceplates:
 - Dimensions: 0.675 in D x 4.490 in W x 4.540 in H
 - For use with openings a minimum of 2.81 in x 3.59 in (not suitable for mud rings/device covers)

Description	Width		Figure	Almond	Black	White	Gray	Electrical Ivory	Alpine White
SL Series Faceplates	Single Gang	Single-sided	A	1339118-1	1339118-2	1339118-3	1339118-4	1-1339118-1	1-1339118-3
	Double Gang	Single-sided	B	1339119-1	1339119-2	1339119-3	1339119-4	1-1339119-1	1-1339119-3
		Double-sided	C	1479486-1	1479486-2	1479486-3	1479486-4	1-1479486-1	1-1339119-3

SL Series Modules



- Modules fit SL Series faceplates
- Front loading
- 2-Port Modules are suitable for use with all SL Series jacks, MT-RJ outlet jacks and SL Series inserts
- 3-Port Module is suitable for use with unshielded SL Series Jacks, MT-RJ Outlet Jacks and SL Series Multimedia Inserts
- 2- and 3-Port Modules feature patented "invisible" icon holes which stay hidden until used
- SVGA Multimedia Modules are available loaded with a SVGA 110 Termination Module or unloaded for use with 15 position subminiature D connectors (sold separately)
- SVGA - 110 Termination Module
 - Suitable for use with Category 5e or 6 UTP or FTP (recommended) cables
 - Supported Resolutions:
 - VGA (640 x 480)
 - SVGA (800 x 600)
 - XGA (1024 x 768)
 - For use where distances between video device and source device do not exceed:
 - 20 ft (Cat 5e or 6 UTP cable)
 - 35 ft (Cat 5e or 6 FTP cables)
 - Recommended for use with FTP cables to utilize drain wire as a 9th conductor
- SVGA - Screw terminal
 - Allows field termination of SVGA cable
 - For distances up to 150 feet
 - Supported Resolutions:
 - 800 x 600
 - Recommended for use with 5 conductor, 26 AWG stranded coaxial video cable

Description	Units	Figure	Almond	Black	White	Gray	Electrical Ivory	Alpine White
Blank	1	A	1116410-1	1116410-2	1116410-3	1116410-4	1-1116410-1	1-1116410-3
	1.5	B	1116407-1	1116407-2	1116407-3	1116407-4	1-1116407-1	1-1116407-3
SC Duplex	Single-mode, Blue Coupler	1	1375306-1	1375306-2	1375306-3	1375306-4	1-1375306-1	1-1375306-3
	Multimode, Beige Coupler	1	1375123-1	1375123-2	1375123-3	1375123-4	1-1375123-1	1-1375123-3
SC Duplex to Dual ST	Multimode, Beige Coupler	1	1375241-1	1375241-2	1375241-3	1375241-4	1-1375241-1	1-1375241-3
SVGA	Loaded with SVGA 110 Punch Down Module	1	1479288-1	1479288-2	1479288-3	1479288-4	1-1479288-1	1-1479288-3
	Unloaded	1	1479079-1	1479079-2	1479079-3	1479079-4	1-1479079-1	1-1479079-3
	Loaded with SVGA Screw Terminal Module	1	1933423-1	1933423-2	1933423-3	1933423-4	1-1933423-1	1-1933423-3
2-Port	Straight	1	1116409-1	1116409-2	1116409-3	1116409-4	1-1116409-1	1-1116409-3
	Angled	1.5	1116406-1	1116406-2	1116406-3	1116406-4	1-1116406-1	1-1116406-3
3-Port	Angled	1.5	1116408-1	1116408-2	1116408-3	1116408-4	1-1116408-1	1-1116408-3
HDMI	Type A Module with Cable	1	1933800-1	1933800-2	1933800-3	1933800-4	1-1933800-1	1-1933800-3
	Type A Module Adapter	1	1933801-1	1933801-2	1933801-3	1933801-4	1-1933801-1	1-1933801-3
	Unloaded	1	1933686-1	1933686-2	1933686-3	1933686-4	1-1933686-1	1-1933686-3

Wall Phone Faceplate

06



- for use with 110Connect or SL Series Modular Jacks
- Features studs used to mount standard wall mount telephones

Description	Almond	Black	White	Gray	Electrical Ivory
Wall Phone Faceplate	1479152-1	1479152-2	1479152-3	1479152-4	1-1479152-1

Angled Faceplates



A



B



- Accept all AMP-TWIST jacks, SL Series jacks, MT-RJ outlet jacks and SL Series inserts
- Angled connector exits
- Protects connections
- Allows closer furniture placement
- Icons in Chapter 17

Description	Port Count	Figure	Almond	Black	White	Gray	Electrical Ivory	Alpine White
Angled Faceplates	2	A	1375155-1	1375155-2	1375155-3	1375155-4	1-1375155-1	1-1375155-3
	4	B	406185-1	406185-2	406185-3	406185-4	1-406185-1	1-406185-3

Stainless Steel Faceplates from Semtron



A



B



C



D



E



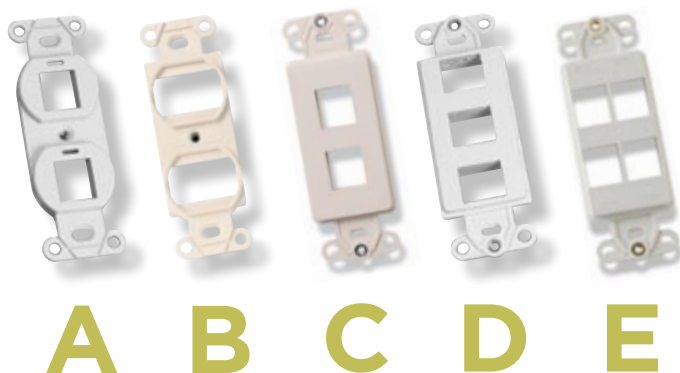
F

- Flush mount installation
- 1FM-ØE-AMP-PHONE is for use with 110Connect or SL Series Modular Jacks and features studs used to mount standard wall mount telephones
- 2-, 4- and 6-Port Faceplates accept SL Series jacks, AMP-TWIST jacks, MT-RJ outlet jacks, and SL Series inserts
- Double Gang Stainless Steel Faceplates with Power additionally accept one duplex power receptacle (sold separately)
- These faceplates are available directly from:
Semtron, Inc.
 6465 Corunna Rd.
 Flint, MI 48532
 Phone: 1-800-732-9080
 Fax: 810-732-9665
 Email: semtron@semtron.com
 Web: www.semtron.com

Description	Port Count	Foot Print	Duplex Power	Labeling	Figure	Semtron Part Number
SEMTRON Stainless Steel Wall Phone Faceplate	1	Single Gang	—	—	A	1FM-ØE-AMP-PHONE
	1	Single Gang	—	—	B	1FM-ØE-AMP-LAB
	2	Single Gang	—	—	C	1FM-ØØE-AMP
		Double Gang	with Duplex Opening	with Labels and Label Covers		2FM-DØØE-AMP
	3	Single Gang	—	with Labels and Label Covers	D	1FM-(3)ØE-AMP-LAB
	4	Single Gang	—	with Labels and Label Covers		1FM-(4)ØE-AMP
		Double Gang	with Duplex Opening	—	E	2FM-D(4)ØE-AMP
	6	Single Gang	—	with Labels and Label Covers		1FM-(6)ØE-AMP
		Double Gang	with Duplex Opening	—	F	2FM-D(6)ØE-AMP
	12	Double Gang	—	with Labels and Label Covers		2FM-(12)ØE-AMP-LAB

Mounting Straps

06



- Accept SL Series jacks, MT-RJ outlet jacks, and SL Series inserts
- Duplex Mounting Straps fit standard duplex faceplates
- Decorator Mounting Straps fit standard decorator faceplates
- Allow easy mounting of communications outlets in power poles and floor pedestals
- Accommodates icons for port identification, see Chapter 17

Description	Port Count	Figure	Almond	Black	White	Gray	Electrical Ivory
Duplex Mounting Strap	2	A	1116618-1	1116618-2	1116618-3	1116618-4	1-1116618-1
	4	B	1339120-1	1339120-2	1339120-3	1339120-4	1-1339120-1
Decorator Mounting Strap	2	C	1479784-1	1479784-2	1479784-3	1479784-4	1-1479784-1
	3	D	1116616-1	1116616-2	1116616-3	1116616-4	1-1116616-1
	4	E	1479504-1	1479504-2	1479504-3	1479504-4	1-1479504-1

Faceplates for Mounting Straps



- Duplex Faceplates accept 2 and 4-Port Duplex Mounting Straps
- Decorator Faceplates accept 2, 3 and 4-Port Decorator Mounting Straps

Description	Footprint	Figure	Almond	Black	White	Gray	Electrical Ivory
Decorator Faceplate	Single Gang	A	1479159-1	1479159-2	1479159-3	1479159-4	1-1479159-1
	Double Gang	B	1479625-1	1479625-2	1479625-3	1479625-4	1-1479625-1
Duplex Faceplate	Single Gang	C	1479160-1	1479160-2	1479160-3	1479160-4	1-1479160-1

HIDEOUT Outlets

06



Snap-on Cover

Screw-on Cover



- Double gang box with single gang cover recommended.
- May not fit all single gang boxes
- Hides and protects cable connections
- Feeds from bottom to allow flush furniture placement
- Fits standard electrical boxes
- Icons in Chapter 17
- Each kit includes sub-plate, faceplate, adhesive labels, cable ties, and mounting screws. Media modules and icons must be ordered separately. Faceplates are plastic except for the stainless steel version
- Accepts the following (see table for detailed load information):
 - Shielded or unshielded SL Series jacks
 - Unshielded 110Connect jacks
 - MT-RJ outlet jacks
 - Duplex fiber optic adapters
 - MT-RJ parallel dress clips
 - SL Series inserts
- Shielded SL Series jacks work in bottom row of faceplate only

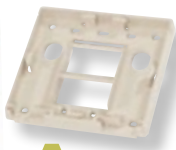
Accepted Connectivity	Maximum Load Capacity			
	Option 1	Option 2	Option 3	Option 4
Unshielded SL Series, 110Connect Jacks, MT-RJ Outlet Jacks, or SL Series Inserts	4	2	0	0
Shielded SL Series Jacks	0	2	2	0
Duplex Fiber Optic Adapters, or MT-RJ Parallel Dress Clips	1	1	1	2

Description	Included Faceplate	Faceplate Color		
		Almond	White	Stainless Steel
HIDEOUT Outlet Kit	Screw-on	503997-1	503997-3	503998-1
	Snap-on	503999-1	503999-3	—

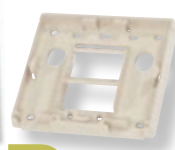
HIDEAWAY Multimedia Outlets



A



B



- Accepts the following (see table for detailed load information):
 - Shielded and unshielded SL Series jacks
 - AMP-TWIST jacks
 - MT-RJ outlet jacks
 - Duplex couplers
 - MT-RJ parallel dress clips
 - SL Series inserts
- Fit single and double gang electrical J-boxes
- Feature "invisible" icon holes which remain hidden until used
- Feature integral tabs for easy fiber loop management
- Breakaway tabs in duplex fiber coupler cut outs allow HIDEAWAY outlets to accept "flangless" SECURE LC duplex, standard LC duplex, or hybrid LC duplex couplers with retention clips (break out the tabs when using standard duplex couplers)

Accepted Connectivity	Maximum Load Capacity	
	4-Port	6-Port
Unshielded SL Series, MT-RJ Outlet Jacks, or SL Series Inserts	4	6
Shielded SL Series Jacks, AMP-TWIST Jacks	4	4
Duplex Fiber Optic Adapters, or MT-RJ Parallel Dress Clips	2	2

Port Count	Figure	Almond	Black	White	Gray	Electrical Ivory
4	A	1479946-1	1479946-2	1479946-3	1479946-4	1-1479946-1
6	B	1479815-1	1479815-2	1479815-3	1479815-4	1-1479815-1

HIDEAWAY Multimedia Outlet Accessories



A



B



C



D

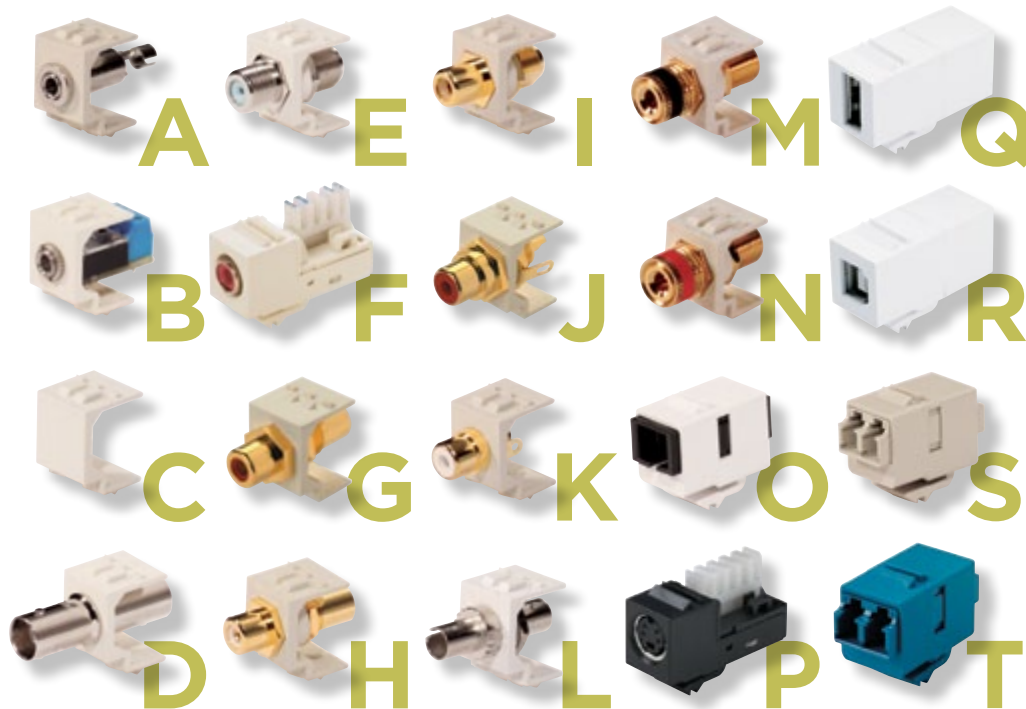


E

- 1-Port MT-RJ Parallel Dress Clip holds one MT-RJ Jack sold separately
- 2-Port MT-RJ Parallel Dress Clip holds two MT-RJ Jacks sold separately
- Optical Fiber Couplers for other fiber types are available

Description		Figure	Part Number
Optical Fiber Adapters	Multimode (Beige)	SC Duplex	A 5504640-3
		SC Duplex to Dual ST	B 5504663-1
		Dual ST	C 504662-1
		LC Duplex (without Mounting Flanges)	6457567-2
MT-RJ Parallel Dress Clips	1-Port (Holds 1 MT-RJ Jack)	Package of 6	D 1374206-1
	2-Port (Holds 2 MT-RJ Jacks)	Package of 3	E 1374205-1

SL Series Multimedia Inserts



- May be used in straight or angled faceplates, SL Series faceplate modules, surface mount modules, mounting straps and SL Series patch panels
- Inserts easily snap into place
- RCA 110 termination multimedia jack:
 - Use where distances are less than 130 ft
 - For audio and video signals
 - Uses one pair of twisted-pair cable
 - White, red or yellow dielectrics to match home theater equipment
 - Not recommended for component DVD connections
- S-Video 110 termination multimedia jack:
 - Use where distances are less than 130 ft
 - For S-Video Y/C (Luminance/Chrominance Black and White/Color) signals
 - Uses two pairs of a standard twisted-pair cable

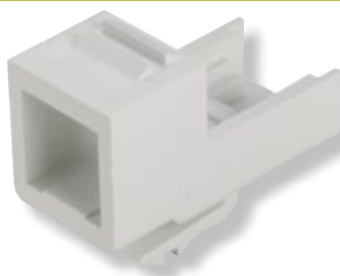
06

Insert Type		Figure	Almond	Black	White	Gray	Electrical Ivory	Alpine White
3.5 mm Stereo, Mini-Headphone	Solder Termination	A	1479086-1	1479086-2	1479086-3	1479086-4	1-1479086-1	1-1479086-3
	Screw Terminal	B	1933582-1	1933582-2	1933582-3	1933582-4	1-1933582-1	1-1933582-3
Blank		C	1116412-1	1116412-2	1116412-3	1116412-4	1-1116412-1	1-1116412-3
BNC Coupler		D	1339124-1	1339124-2	1339124-3	1339124-4	1-1339124-1	1-1339124-3
F-Connector Coupler 2 GHz		E	1499855-1	1499855-2	1499855-3	1499855-4	1-1499855-1	1-1499855-3
RCA to 110 Punch Down	Red Dielectric	F	1479230-1	1479230-2	1479230-3	1479230-4	1-1479230-1	1-1479230-3
	White Dielectric		1479231-1	1479231-2	1479231-3	1479231-4	1-1479231-1	1-1479231-3
	Yellow Dielectric		1479232-1	1479232-2	1479232-3	1479232-4	1-1479232-1	1-1479232-3
RCA Coupler	Red Dielectric	G	1375361-1	1375361-2	1375361-3	1375361-4	1-1375361-1	1-1375361-3
	White Dielectric	H	1375362-1	1375362-2	1375362-3	1375362-4	1-1375362-1	1-1375362-3
	Yellow Dielectric		1375363-1	1375363-2	1375363-3	1375363-4	1-1375363-1	1-1375363-3
	Green Dielectric		1933192-1	1933192-2	1933192-3	1933192-4	1-1933192-1	1-1933192-3
	Blue Dielectric		1933193-1	1933193-2	1933193-3	1933193-4	1-1933193-1	1-1933193-3
	Orange Dielectric		1933194-1	1933194-2	1933194-3	1933194-4	1-1933194-1	1-1933194-3
RCA to F-Connector		I	1933096-1	1933096-2	1933096-3	1933096-4	1-1933096-1	1-1933096-3
RCA to Solder Termination	Red Dielectric	J	1375364-1	1375364-2	1375364-3	1375364-4	1-1375364-1	1-1375364-3
	White Dielectric	K	1375365-1	1375365-2	1375365-3	1375365-4	1-1375365-1	1-1375365-3
	Yellow Dielectric		1375366-1	1375366-2	1375366-3	1375366-4	1-1375366-1	1-1375366-3
ST Coupler	Multimode	L	1339123-1	1339123-2	1339123-3	1339123-4	1-1339123-1	1-1339123-3
	Single-mode	L	1479181-1	1479181-2	1479181-3	1479181-4	1-1479181-1	1-1479181-3
Speaker Post	Black Stripe	M	1479190-1	1479190-2	1479190-3	1479190-4	1-1479190-1	1-1479190-3
	Red Stripe	N	1479191-1	1479191-2	1479191-3	1479191-4	1-1479191-1	1-1479191-3
SC Simplex Coupler	Single-mode/Multimode	O	1499836-1	1499836-2	1499836-3	1499836-4	1-1499836-1	1-1499836-3
S-Video		P	—	1375149-2	—	—	—	—
USB A to A Coupler		Q	1933659-1	1933659-2	1933659-3	—	—	—
USB B to A Coupler		R	1933661-1	1933661-2	1933661-3	—	—	—
HDMI Coupler			—	2111500-2	—	—	—	—
LC Duplex Coupler	Beige, OM1 (62.5 µm) Multimode	S			1-1933286-2			
	Black, OM2 (50 µm) Multimode				1-1933286-1			
	Aqua, OM3 and OM4 (XG 50 µm) Multimode				1933286-6			
	Green, Single-mode APC				1933286-3			
	Blue, Single-mode	T			1933286-4			

Note: APC (Angle Polish Connector) couplers are for use with angle polished connectors.

MT-RJ SL Series Multimedia Housing

06



- Easily snap into place
- MT-RJ SL Series housing accepts one MT-RJ Jack sold separately

Description

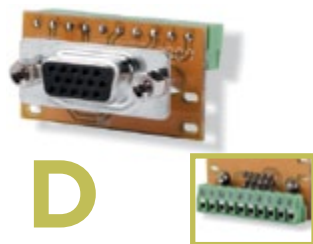
MT-RJ SL Series Housing

Color

Part Number

Almond	1374416-1
Black	1374416-2
White	1374416-3
Gray	1374416-4
Orange	1374416-5
Blue	1374416-6
Red	1374416-7
Yellow	1374416-8
Green	1374416-9
Violet	1-1374416-0
Electrical Ivory	1-1374416-1
Rose	2-1374416-3
Aqua	2-1374416-4
Brown	2-1374416-5
Slate	2-1374416-6

Multimedia Modules for Work Area Outlets



WIRING DIAGRAM

COLOR	TERMINAL BLOCK	HD PIN	SIGNAL
WHT/GRN	A	1	RED INPUT
WHT/GRN	B	2	GREEN INPUT
WHT/BLU	C	3	BLUE INPUT
	D	4,5,10,11	SHD HORZ/VERT SYNC
	E	6	SHD RED
ORNGE	F	7	SHD GREEN
GRN	G	8	SHD BLUE
BLU	H	9	HORZ SYNC
W/GRN	I	13	VERT SYNC
BROWN	J	14	

WIRING DIAGRAM

WIRE COLOR	TERMINAL	HD 15P	SIGNAL NAME
RED CENTER	1	1	RED INPUT
SHIELD-RED	2	2	SHD-RED
GREEN CENTER	3	3	GREEN INPUT
SHIELD-GREEN	4	4	SHD-GREEN
BLUE CENTER	5	5	BLUE INPUT
SHIELD-BLUE	6	6	SHD-BLUE
	7	7	SHD-WHT, VERT SYNC
WHITE CENTER	8	8	SHD-WHT
SHIELD-WHITE	9	9	SHD-BLUE
BLACK CENTER	10	10	SHD-BLUE
SHIELD-BLACK	11	11	SHD-CLK

- SVGA 110 termination modules:
 - Supported resolutions:
 - VGA (640 x 480)
 - SVGA (800 x 600)
 - XGA (1024 x 760)
 - Features 110-Style termination for easy installation
 - Is suitable for use with standard Category 5e or 6 UTP or F/UTP (recommended) cables
 - Can be used where distances between monitor and computer do not exceed:
 - 20 ft with Cat 5e or 6 UTP cable
 - 35 ft with Cat 5e or 6 FTP cable
 - Utilizing drain wire for 9th conductor is recommended for use with FTP cables
 - Dimensions: 1.180 in D x 1.480 in W x 0.875 in H
 - Stuffer caps and hex head stand-off screws included
 - Fits SVGA blank SL Series Module, P/N:1479079
- SVGA screw terminal termination module:
 - Works with VGA and SVGA signals
 - Allows field termination of SVGA cable
 - For distances of up to 150 feet at a resolution of 800 x 600 using standard 5 conductor 26 AWG coaxial video cable
 - Fits SVGA blank SL Series Module, P/N:1479079
- SVGA - Screw terminal
 - Allows field termination of SVGA cable
 - For distances up to 150 feet
 - Supported Resolutions:
 - 800 x 600
 - Recommended for use with 5 conductor, 26 AWG stranded coaxial video cable
- HDMI modules fit into HDMI blank SL Series module, P/N: 1933686

Description

Figure

Part Number

HDMI Adapter, Type A	A	1933635-2
HDMI Adapter Cable Assembly, Type A	B	1933636-2
SVGA Assembly, 110 Termination	C	1479287-2
SVGA Assembly, Screw Terminal Termination	D	1933424-2

Multimedia Security Outlet

06



Cover Security Screw



- High-capacity outlet
- Accommodates a wide assortment of multimedia inserts
- Well suited for "high-low" (remote monitor) outlet applications in classrooms and training facilities
- Supports up to nine ports of twisted-pair, coax and/or optical fiber connectivity as well as an SVGA or serial module and a duplex optical fiber adapter
- Accepts:
 - All SL Series jacks and MT-RJ outlet jacks
 - Duplex optical fiber adapters
 - All multimedia inserts
 - RJ45 SECURE jacks and SECURE optical fiber inserts

Description

Multimedia Security Outlet

Part Number

1116535-1

Surface Mount Outlet and Accessories



Suggested Loading Pattern for the Surface Mount Outlet

The application chart is a suggested loading pattern for the Surface Mount Outlet. The Surface Mount Outlet inserts can be configured according to network requirements. The size of the connectors, however, limits some applications. In particular, the corner slots present some loading problems when using larger connectors. Therefore, this application chart was developed to assist in adjacent corner connector configuration. The "X" denotes the suggested loading patterns for the corner slots of the Surface Mount Outlet.

	Dual ST or SC	110Connect, SL Series, or MT-RJ Jacks	Dual 110Connect, SL Series, or MT-RJ Jacks
Dual ST or SC		X	
110Connect, SL Series, or MT-RJ Jacks	X	X	X
Dual 110Connect, SL Series, or MT-RJ Jacks		X	

- Provides a convenient and aesthetically pleasing workstation outlet for virtually all network needs
- Capability to install mixed media: coax, fiber and twisted pair
- Simply select the adapter kits for the media being used and install them in the Surface Mount Outlet
- The kit is shipped with matching icons. Additional icons in Chapter 17
- Surface Mount Outlet is available in Almond only.

Description

Surface Mount Outlet Assembly - Top, bottom, label, cover, hardware, 8 blank inserts

Blank Insert

Surface Raceway Adapter

Duplex ST or Duplex SC Insert (Fiber receptacles not included)

Dual ST Bulkhead Adapter Insert (Receptacle included)

AMP Communications Outlet Adapter Insert (Requires single-port installation kit and connector insert)

Single 110Connect Jack, SL Series or MT-RJ Insert (Jack not included)

Dual 110Connect Jack, SL Series or MT-RJ Insert (Jacks not included)

Part Number

557366-1

557361-1

557685-1

1116111-1

557350-1

557364-1

1116098-1

557775-1

Surface Mount Modules

06



- Provide flexible surface mounting of 2, 4 or 6-ports
- Accept AMP-TWIST, SL Series jacks, MT-RJ outlet jacks, and SL Series inserts
- Compatible with surface raceway systems and modular furniture raceways
- Modules include label, clear label cover, double-sided foam tape, self-tapping screws, and cable ties
- Modules can be mounted with magnets (purchased separately)
- Dimensions:
 - 2-port: 1.5 in H x 3.0 in W x 4.0 in D
 - 4-port: 1.5 in H x 5.6 in W x 4.6 in D
 - 6-port: 1.5 in H x 5.6 in W x 4.6 in D

Description	Port Count	Figure	Almond	Black	White	Gray	Electrical Ivory	Alpine White
Surface Mount Modules	2	A	1933668-1	1933668-2	1933668-3	1933668-4	1-1933668-1	1-1933668-3
	4	B	1933671-1	1933671-2	1933671-3	1933671-4	1-1933671-1	1-1933671-3
	6	C	1933674-1	1933674-2	1933674-3	1933674-4	1-1933674-1	1-1933674-3
Surface Mount Module Magnets	Pack of 4	D	1933677-1					

12-Port Universal Surface Mount Outlet



- Accepts all SL Series jacks, 110Connect jacks, MT-RJ outlet jacks, and SL Series inserts
- Molded numbering for each port
- Uses same labeling and label covers as standard faceplates
- Low profile design
- Features fiber loop storage
- Compatible with most surface raceways
- Mounts to standard NEMA single and double gang surface boxes
- Integrated modular jack holder for terminations
- "Invisible" Icon holes stay hidden until used
- Accommodates up to twelve 4-pair cables

Description	Almond	Black	White	Gray	Electrical Ivory	Alpine White
12-Port Universal Surface Mount Outlet	1479358-1	1479358-2	1479358-3	1479358-4	1-1479358-1	1-1479358-3
Surface Mount Module Magnets, Pack of 4	1479398-1					

Surface Boxes



A



B

- One-piece construction simplifies installation
- Single gang surface box is 1 3/4 in deep
- Double gang surface box is 2 in deep

06

Footprint	Figure	Almond	Black	White	Gray	Electrical Ivory	Alpine White
Single Gang	A	558251-1	558251-2	558251-3	558251-4	1-558251-1	1-558251-3
Double Gang	B	569499-1	569499-2	569499-3	569499-4	1-569499-1	1-569499-3

Modular Jack Boxes



A



B



- Accepts unshielded SL Series jacks, 110Connect jacks and MT-RJ outlet jacks
- "Invisible" icon holes remain hidden when not used

Description	Port Count	Figure	Almond	Black	White	Gray	Electrical Ivory
Modular Jack Boxes	1-Port	A	1116697-1	1116697-2	1116697-3	1116697-4	1-1116697-1
	2-Port	B	1116698-1	1116698-2	1116698-3	1116698-4	1-1116698-1
Blank Insert for Modular Jack Boxes			1933172-1	1933172-2	1933172-3	1933172-4	1-1933172-1

NOTE: Modular jack boxes do not accept Multimedia inserts. Blank Insert only works with these boxes.

Faceplates for WIREMOLD Raceways

06



A



B

- Designed to be identical to Wiremold 5507 Series Faceplates and will mount in 4049, 5400, and 5500 series device plates and brackets
- Accept all SL Series jacks and multimedia inserts
- "Invisible" icon holes remain hidden if not used

Description	Port Count	Figure	Almond	Gray
Faceplates for WIREMOLD Raceways	3	A	1375050-1	1375050-4
	4	B	1375049-1	1375049-4

WIREMOLD 2A Inserts



- Allows the use of SL Series jacks and inserts in Wiremold raceways, poke-thru service fittings, and power poles
- Accepts up to two SL Series jacks or inserts
- Installation and configuration ease
- Modules feature a front load snap-in design for ease of

installation and allowing outlet configuration changes to be made quickly

- To order contact:
The Wiremold Company
 60 Woodlawn Street
 West Hartford, CT 06110
 1-800-621-0049
 Fax: 860-232-2062
 Web: www.wiremold.com

Description	Color	Part Number
Wiremold 2A, 2-Port Inserts	Ivory	CM2-U2AMP
	White	CM2-U2AMP-WH
	Black	CM2-U2AMP-BK
	Gray - Steel Raceway	CM2-U2AMP-G
	Light Gray - Aluminum Raceway	CM2-U2AMP-GY

Access Floor Workstation Modules



- Provide power and communications connectivity in raised flooring
- 2, 3, 4, and 5 gang sizes available
- For use with carpet squares
- Load bearing exceeds UL and agency requirements:
 - UL listed, CSA certified
 - UL 514A metallic outlet boxes
 - UL 183 manufactured wiring system
 - CSA C22-2 No. 18-M1987 outlet boxes, conduit boxes and fittings
- Access Floor Workstation Modules shown loaded for reference only
- AFWMs Comply with NEC 300-22(c) requirements for use in environmental air spaces
- Replacement Lids can be easily field changed and are shipped fully assembled
- Five Gang AFWM:
 - Accepts any combination of power and communications
 - Accepts all standard AFWM Faceplates
 - Outlets flip up above floor for easy access
 - Large cable opening enables disassembly and relocation without re-termination of communications connectors
 - Suitable for use in non-environmental air spaces
 - Requires the use of enclosure kit 1479449 to comply with NEC 300-22(c)
- Four Gang AFWM:
 - Accepts two duplex power receptacles or duplex mounting straps, and two standard FLEX-MODE faceplates
 - Shallow profile provides easy access to connections
- Three Gang AFWM:
 - Accepts any combination of power and communications
 - Accepts all standard AFWM Faceplates
- Two Gang AFWM:
 - Accepts any combination of power and communications
 - Each gang accepts a duplex electrical receptacle or duplex mounting strap for communications connectors

06

Description	Footprint	Height	Width	Raised Floor Depth (Floor Height Measured From Top of Raised Floor to Top of Main Floor Surface)	Figure	Almond	Black	Gray
Access Floor Workstation Modules	5 Gang	8 in	12 in	5.5 in	A	557601-1	557601-3	557601-4
	4 Gang	8 in	12 in	2.6 in	B	406376-1	406376-3	406376-4
	3 Gang	7.375 in	7.375 in	5.5 in	C	558716-1	558716-3	558716-4
	2 Gang	7.375 in	7.375 in	3.5 in	D	558718-1	558718-3	558718-4
Replacement Lid for AFWMs	2 and 3 Gang	—	—	—		558717-1	558717-3	558717-4
	4 Gang	—	—	—		406861-1	406861-3	406861-4
Replacement Bezel for AFWMs	4 and 5 Gang	—	—	—	E	769046-1	769046-3	769046-4
Galvanized Steel								
Enclosure Kit for AFWMs	5 Gang	—	—	6.0 in	F		1479499-1	

AFWM Flush Faceplates

06



- Include faceplate and mounting hardware
- For 3 and 5 Gang Access Floor Workstation Modules only
- 2, 3, and 4-port faceplates accept:
 - Inserts for modular jack panels and standard FLEX-MODE faceplates
 - 110Connect or SL Series modular jacks
 - MT-RJ outlet jacks
- Blank AFWM faceplates may also be cut or punched for custom mounting options

Description	For Use With	Figure	Almond	Black	White	Gray
Communications Outlet Faceplates	2-Port 110Connect, SL Series or MT-RJ Outlet Jacks	A	569916-1	—	569916-5	569916-4
	3-Port 110Connect, SL Series or MT-RJ Outlet Jacks	B	569917-1	—	569917-5	569917-4
	4-Port SL Series or MT-RJ Outlet Jacks	C	1116695-1	—	1116695-5	1116695-4
	ACO One Dual-port Low Profile ACO Installation Kit	D	769021-1	—	769021-5	769021-4
	FLEX-MODE One Standard FLEX-MODE Faceplate	E	769020-1	—	769020-5	769020-4
	SVGA Accepts one SVGA assembly (not included)	F	1499720-1	—	1499720-5	1499720-4
	Blank	G	557655-1	—	557655-5	557655-4
	Duplex Optical Fiber Adapter One SC Duplex or Dual ST	J	569646-1	—	569646-5	569646-4
Power Outlet Faceplates	Two SC Duplex or Dual ST	K	569648-1	—	569648-5	569648-4
	Duplex Power Faceplate One "Double D" Duplex Receptacle or Duplex Mounting Strap	H	769028-1	—	769028-5	769028-4
	Decorator Receptical One Decorator-Style Receptacle or Decorator Mounting Strap	I	769016-1	—	769016-5	769016-4
Inserts	Blank Insert	L	558856-2	558856-1	—	—
	BNC	M	558861-2	558861-1	—	—

Concrete Form Boxes from Barthelmes Mfg. Co.



- Accept Access Floor Workstation Modules as listed
- Allows for installation of Access Floor Workstation Module in slab-on grade applications
- AFWM boxes are purchased separately
- Ordering Contact:
Barthelmes Mfg. Co.
 15 Cairn Street
 Rochester, NY 14611-2491
 Telephone: 585-328-8140
 Web: www.barthelmes.com

Accepts	OD (in Inches)	Barthelmes Part Number
4 & 5 Gang AFWMs	18" W x 18" D x 6.3" H	U135806
2 & 3 Gang AFWMs	18" W x 18" D x 6.3" H	U135820
4 Gang AFWMs	18" W x 18" D x 3.5" H	U135830
	18" W x 18" D x 2.75" H	U135840

NOTE: AFWM boxes are purchased separately.

Desktop Monuments

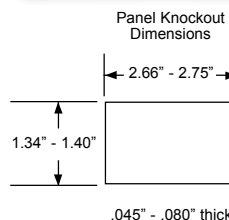
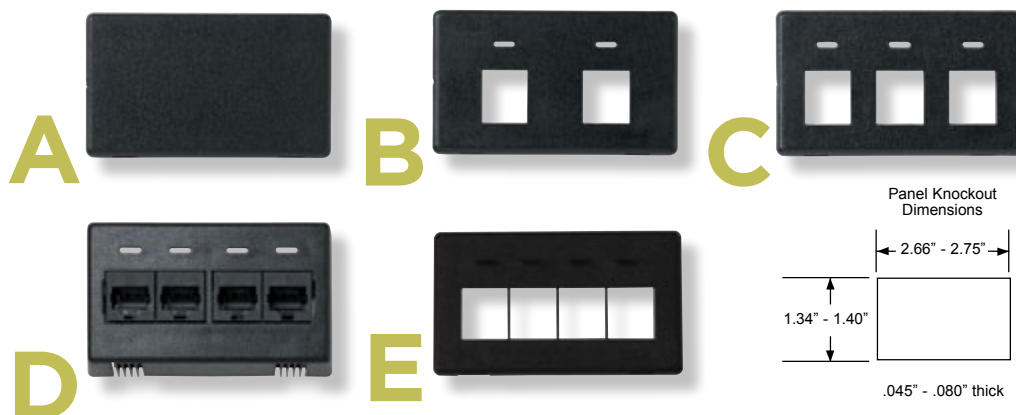
06



- Power Monuments:
 - Provide access to duplex power outlet at the desktop
 - Eliminates the need to feed power cables behind or through desks
 - Supplied with an 8 ft (2.4 m), 3-prong power cord for connection to existing electrical outlets
- Voice/Data Monuments:
 - Accepts standard FLEX-MODE faceplates
 - Horizontal cabling can be connected directly to SL Series Modular Jacks (recommended for Category 5e applications)
- Attach to any desktop from 0.90 in - 1.78 in (22.9 mm - 45.2 mm)
- No special tools required to attach, simply place the monument onto the edge of the desktop and tighten the integrated thumb screw
- UL Listed and CSA Certified

Description/Color	Color	Figure	Part Number
Power Monument, 15 Amp	Black	A	556222-3
Voice/Data Monument Empty Housing (requires FLEX-MODE Faceplate)	Black	B	1116360-3

FLEX-MODE Modular Furniture Faceplate Kits

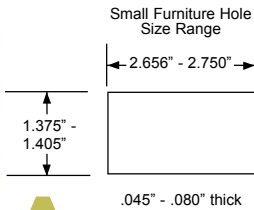


- FLEX-MODE faceplates:
 - Accept all SL Series jacks, MT-RJ outlet jacks, 110Connect jacks, or SL Series inserts
 - Compatible with Telecommunications furniture outlet openings as specified in TIA/EIA-569-B standard
- 110Connect 4-port modules:
 - Printed circuit board assemblies include 4 jacks
 - Ideal for thin panels
- SL Series faceplates:
 - Accepts unshielded SL Series jacks, MT-RJ outlet jacks and SL Series inserts
 - "Invisible" icon holes stay hidden till used

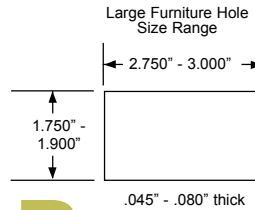
Description	Port Count	Wiring	Figure	Almond	Black	Gray
Blank Plate	—	—	A	558471-2	558471-1	558471-4
FLEX-MODE Flush Faceplate	2	—	B	558106-2	558106-1	558106-4
	3	—	C	558107-2	558107-1	558107-4
Category 5e, 110 Connect 4-Port Module	4	T568A/T568B	D	1116580-2	1116580-1	1116580-4
SL Series	4	—	E	1933134-2	1933134-1	1933134-4

SL Series Furniture Outlets

06



A



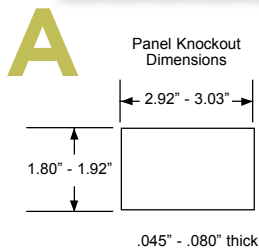
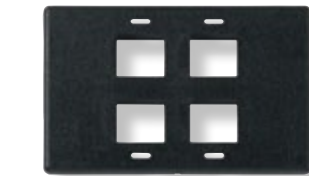
B

- Accept up to 4 unshielded SL Series jacks, MT-RJ outlet jacks and SL Series multimedia inserts
- Two bases adapt to a wide range of hole sizes
- Tabs on base fold over and crimp to furniture raceway cover
- "Invisible" icon holes stay hidden until used

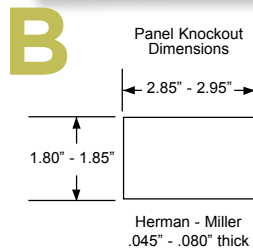
Description

		Figure	Almond	Black	White	Gray
SL Series Furniture Outlet	Small opening	A	1375005-1	1375005-2	1375005-3	1375005-4
	Large opening	B	1375006-1	1375006-2	1375006-3	1375006-4

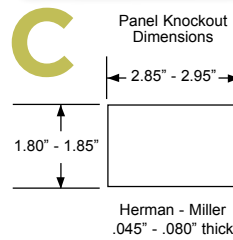
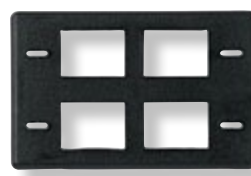
Faceplates for HERMAN MILLER Furniture



A



B



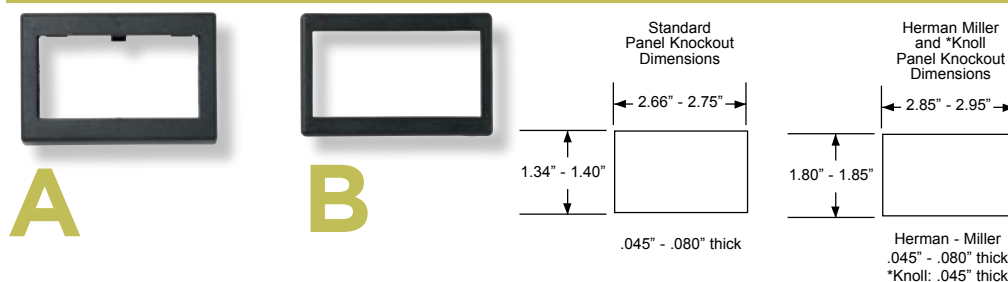
C

- Flush faceplates:
 - Accepts unshielded 110Connect jacks, all SL Series jacks and MT-RJ outlet jacks
 - Jacks fit flush with front of faceplate
 - No backup plate required
- Standard faceplates:
 - Accepts unshielded 110Connect Jacks, all SL Series Jacks, MT-RJ Outlet Jacks, and 110Connect and SL Series Multimedia Inserts
 - May require backup plates depending on furniture style

Description

		Port Count	Figure	Almond	Black	Gray
Faceplate for HERMAN MILLER Furniture	Flush	4	A	558357-2	558357-1	558357-4
	Standard	2	B	569127-2	569127-1	569127-4
		4	C	558191-2	558191-1	558191-4

Extenders & Adapters for Furniture Faceplates



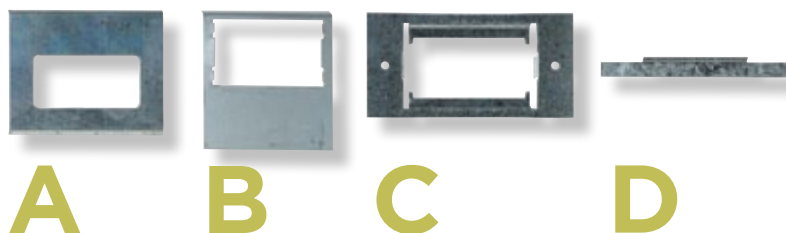
- Extenders:
 - Use when depth of furniture panel is limited
 - Raise outlet face approximately $\frac{3}{4}$ in above surface of raceway
- Adapters are used to adapt standard FLEX-MODE Electrical Faceplates to other hole sizes

06

Description		Figure	Almond	Black	Gray
HERMAN MILLER	Standard Extender	A	1933468-2	1933468-1	1933468-4
	Extender	A	558488-2	558488-1	558488-4
	Adapter	B	558493-2	558493-1	558493-4
KNOLL (Prior to 1992)	Extender	A	558489-2*	558489-1*	558489-4*
	Adapter	B	558492-2*	558492-1*	558492-4*

*Note: Used to adapt standard FLEX-MODE Electrical faceplates to Knoll furniture manufactured prior to 1992.

FLEX-MODE Modular Furniture Faceplate Accessories



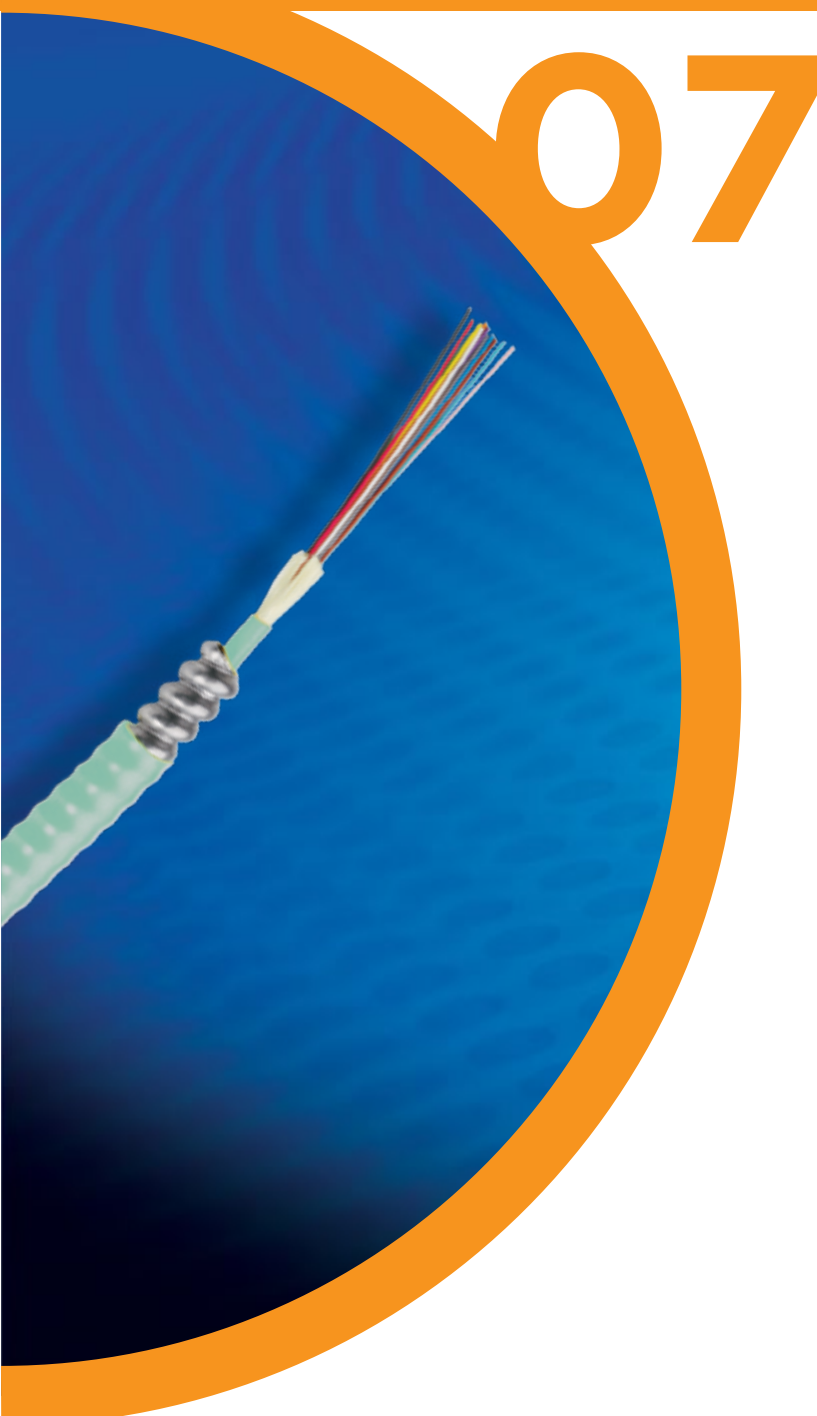
Description	For use with	Figure	Part Number
Backup Plate	WESTINGHOUSE Furniture	A	608046-1
	HERMAN MILLER ACTION OFFICE 2 and ETHOSPACE Furniture (1991 or later)	B	608440-1
Accessory Clip	HERMAN MILLER SERIES 3 power opening	C	557751-1
	HERMAN MILLER Furniture (before 1991)	D	608441-1



06-20

AMP, AMP NETCONNECT, NETCONNECT, TE LOGO AND TYCO ELECTRONICS ARE TRADEMARKS.
OTHER PRODUCTS, LOGOS AND COMPANY NAMES MENTIONED HEREIN MAY BE TRADEMARKS OF THEIR RESPECTIVE OWNERS.





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XG OM3 & OM4 Multimode Optical Fiber Cable Information

07

AMP NETCONNECT fiber optic cables contain fibers for use in optical fiber applications, including: local area networks (LANs), wide area networks (WANs), fiber to the curb (FTTC), fiber to the home (FTTH), fiber to the desk (FTTD), and others.

The AMP NETCONNECT XG Optical Fiber System is a high performance cabling system which has been designed to meet or exceed the requirements of the 10 Gigabit Ethernet application while still supporting all legacy LED and VCSEL applications. The system fulfills the specifications of IEEE 802.3ae for 10GBASE-SR (10 Gigabit Ethernet serial transmission on MMF at 850nm) using OM3 and OM4 fiber.

AMP NETCONNECT Optical Fiber Cables are tested and designed to the most recent applicable industry standards for premise cabling, network and telecommunications applications, including:

IEEE 802.3	Ethernet	Fast Ethernet	Gigabit Ethernet
10 Gigabit Ethernet	FDDI	ATM	Fibre Channel
Token Ring	ANSI/TIA-568	ISO 11801	ICEA-596
ICEA-640	ICEA-696	IEC 793-1	IEC 794-1
Telecordia GR-409-CORE	Telecordia GR-20-CORE		

XG Multimode Optical Fiber Performance

Fiber Type	Gigabit Ethernet @ 850 nm	Gigabit Ethernet @ 1300 nm	10 Gigabit Ethernet @ 850 nm	10 Gigabit Ethernet @ 1300 nm
XG OM3 (850 nm LO 50 μm) Multimode	800 m	550 m	300 m	300 m
XG OM4 (850 nm LO 50 μm) Multimode	> 800 m	550 m	550 m	300 m

XG Multimode (850/1300 nm) Optical Fiber Cable Performance Specifications

Cable Type	Fiber Type	Maximum Attenuation dB/km		OFL Bandwidth MHz·km		Laser Bandwidth MHz·km	
		850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
Indoor, Indoor/Outdoor, and OSP Loose Tube Cables	XG OM3 Multimode	3.2	1.2	1500	500	2000	–
	XG OM4 Multimode	3.2	1.2	3500	500	4700	–

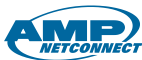
Optical Fiber Cable Temperature Ranges

Cable Type	Condition	Riser		Plenum	
		Storage	Operating	Storage	Operating
Interconnect (Tight Buffered) Cables	Storage	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)
	Operating	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
	Installation	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
Indoor, Distribution (Tight Buffered) Cables	Storage	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)
	Operating	-20°C to +70°C (-4°F to +158°F)	0°C to +70°C (32°F to +158°F)	0°C to +70°C (32°F to +158°F)	0°C to +70°C (32°F to +158°F)
	Installation	-10°C to +60°C (14°F to +140°F)	0°C to +60°C (32°F to +140°F)	0°C to +60°C (32°F to +140°F)	0°C to +60°C (32°F to +140°F)
Indoor/Outdoor Cables	Storage	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)
	Operating	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)
	Installation	-20°C to +60°C (-4°F to +140°F)	-0°C to +60°C (-32°F to +140°F)	-0°C to +60°C (-32°F to +140°F)	-0°C to +60°C (-32°F to +140°F)
Stranded Cables					
OSP (Loose Tube) Cables	Storage	-40°C to +70°C (-40°F to +158°F)	–	–	–
	Operating	-40°C to +70°C (-40°F to +158°F)	–	–	–
	Installation	-30°C to +60°C (-22°F to +140°F)	–	–	–

Optical Fiber Cable Technical Information

Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Diameter mm (in)	Weight kg/km (lb/kft)	Tensile Load N (lbf)		Bending Radius mm (in)	
					Installation	Long Term	Installation	Long Term
Outside Plant, Single Loose Tube	4	1 (4)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	6	1 (6)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	8	1 (8)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	12	1 (12)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
Outside Plant, Stranded Loose Tube	24	2 (12)	11.0 (0.43)	100 (67)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	36	3 (12)	11.0 (0.43)	93 (62)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	48	4 (12)	11.0 (0.43)	97 (65)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	72	6 (12)	11.9 (0.47)	130 (87)	2670 (600)	890 (200)	252 (9.9)	126 (5.0)
	96	8 (12)	13.6 (0.53)	158 (106)	2670 (600)	890 (200)	287 (11.3)	144 (5.6)
	144	12 (12)	17.6 (0.69)	252 (169)	2670 (600)	890 (200)	364 (14.3)	182 (7.2)
Outside Plant, Armored Single Loose Tube	4	1 (4)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	6	1 (6)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	8	1 (8)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	12	1 (12)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
Outside Plant, Armored Stranded Loose Tube	24	2 (12)	13.8 (0.55)	214 (144)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	36	3 (12)	13.8 (0.55)	218 (146)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	48	4 (12)	13.8 (0.55)	223 (150)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	72	6 (12)	14.8 (0.58)	265 (178)	2670 (600)	890 (200)	335 (13.2)	167 (6.6)
	96	8 (12)	16.7 (0.69)	307 (206)	2670 (600)	890 (200)	378 (14.9)	189 (7.4)
	144	12 (12)	21.4 (0.84)	498 (335)	2670 (600)	890 (200)	455 (17.9)	228 (9)

XG OM3 & OM4 (50/125 μm) Multimode



Optical Fiber Cable Technical Information (Continued)

Cable Type	Fiber Count	Unit Count Units (Fibers/ Unit)	UL/NEC Ratings	Diameter mm (in)	Weight kg/km (lb/ kft)	Tensile Load N (lbf)		Bending Radius mm (in)	
						Installation	Long Term	Installation	Long Term
Interconnect, Simplex	1	1 (1)	OFNR	2.0 (0.08)	5 (3)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNP	2.0 (0.08)	6 (4)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNR	2.9 (0.11)	8 (5)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
			OFNP	2.9 (0.11)	9 (6)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
Interconnect, Zipcord	2	2 (1)	OFNR	2.0 (0.08) x 4.1 (0.16)	8 (5)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNP	2.0 (0.08) x 4.1 (0.16)	10 (7)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNR	2.9 (0.11) x 5.9 (0.23)	15 (10)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
			OFNP	2.9 (0.11) x 5.9 (0.23)	15 (10)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
Interconnect, Dual	2	1 (2)	OFNR	2.9 (0.11)	7 (5)	100 (22)	30 (7)	57 (2.2)	29 (1.1)
			OFNP	2.9 (0.11)	9 (6)	100 (22)	30 (7)	57 (2.2)	29 (1.1)
			OFNR	4.8 (0.3)	20 (13)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
			OFNP	4.8 (0.3)	30 (20)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
Interconnect, Quad	4	1 (4)	OFNR	4.8 (0.3)	25 (17)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
			OFNP	4.8 (0.3)	30 (20)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
Distribution	6	1 (6)	OFNR	5.2 (0.20)	29 (19)	660 (150)	198 (45)	114 (4.5)	57 (2.2)
			OFNP	4.8 (0.19)	24 (16)	440 (100)	132 (30)	110 (4.3)	55 (2.2)
	8	1 (8)	OFNR	5.7 (0.22)	24 (16)	660 (150)	198 (45)	136 (5.4)	68 (2.7)
			OFNP	5.0 (0.20)	26 (17)	440 (100)	132 (30)	110 (4.3)	55 (2.2)
	12	1 (12)	OFNR	6.0 (0.24)	37 (25)	660 (150)	198 (45)	128 (5)	64 (2.5)
			OFNP	5.7 (0.23)	46 (31)	440 (100)	132 (30)	128 (5)	64 (2.5)
	24	1 (24)	OFNR	8.0 (0.31)	61 (41)	1320 (300)	396 (90)	178 (7)	89 (3.5)
			OFNP	7.7 (0.30)	69 (46)	660 (150)	198 (45)	168 (6.6)	84 (3.3)
	24	2 (12)	OFNR	7.4 x 13.0 (0.29 x 0.51)	87 (58)	1320 (300)	396 (90)	284 (11.2)	142 (5.6)
			OFNP	7.0 x 12.4 (0.28 x 0.49)	92 (62)	660 (150)	198 (45)	264 (10.4)	132 (5.2)
	24	4 (6)	OFNR	13.4 (0.53)	180 (121)	1320 (300)	396 (90)	275 (10.8)	137 (5.4)
			OFNP	13.3 (0.52)	200 (134)	660 (150)	198 (45)	266 (10.5)	133 (5.2)
	36	6 (6)	OFNR	16.4 (0.65)	220 (148)	1320 (300)	396 (90)	342 (13.5)	171 (6.7)
			OFNP	16.0 (0.63)	255 (171)	660 (150)	198 (45)	327 (12.9)	164 (6.4)
	48	4 (12)	OFNR	16.0 (0.63)	250 (168)	1320 (300)	396 (90)	350 (13.8)	175 (6.9)
			OFNP	15.2 (0.60)	202 (136)	660 (150)	198 (45)	312 (12.3)	156 (6.1)
	72	6 (12)	OFNR	18.9 (0.75)	301 (202)	1320 (300)	396 (90)	386 (15.2)	193 (7.6)
			OFNP	18.5 (0.73)	316 (212)	660 (150)	198 (45)	386 (15.2)	193 (7.6)
	96	8 (12)	OFNR	22.8 (0.90)	433 (291)	1320 (300)	396 (90)	462 (18.2)	231 (9.1)
			OFNP	22.0 (0.86)	466 (313)	660 (150)	198 (45)	448 (17.6)	224 (8.8)
	144	12 (12)	OFNR	24.8 (0.98)	461 (310)	1320 (300)	396 (90)	514 (20.2)	257 (10.1)
			OFNP	24.2 (0.95)	474 (319)	660 (150)	198 (45)	514 (20.2)	257 (10.1)
Distribution, Interlocking Armor	6	1 (6)	OFCP	13.1 (0.52)	117 (79)	1335 (300)	400 (90)	197 (7.8)	131 (5.2)
	12	1 (12)	OFCP	13.3 (0.52)	129 (87)	1335 (300)	400 (90)	199 (7.8)	133 (5.2)
	24	1 (24)	OFCP	14.8 (0.58)	176 (119)	1780 (400)	534 (120)	223 (8.8)	148 (5.8)
	24	2 (12)	OFCP	18.9 (0.74)	240 (161)	1780 (400)	534 (120)	192 (7.6)	128 (5.0)
	48	4 (12)	OFCP	23.4 (0.92)	408 (274)	2640 (600)	800 (180)	351 (13.8)	234 (9.2)
	72	6 (12)	OFCP	24.7 (0.97)	537 (361)	2640 (600)	800 (180)	371 (14.6)	247 (9.7)
Indoor/Outdoor, Single Loose Tube	6	1 (6)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	45 (30)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
	8	1 (8)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	46 (31)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
	12	1 (12)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	46 (31)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
Indoor/Outdoor, Stranded Loose Tube	24	2 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	36	3 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	48	4 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	72	6 (12)	OFNR	11.9 (0.47)	111 (75)	2670 (600)	890 (200)	178 (7.0)	119 (4.7)
			OFNP	11.7 (0.46)	101 (68)	2670 (600)	890 (200)	175 (6.9)	117 (4.6)
	96	8 (12)	OFNR	13.7 (0.54)	147 (99)	2670 (600)	890 (200)	206 (8.1)	137 (5.4)
			OFNP	13.5 (0.53)	175 (118)	2670 (600)	890 (200)	203 (8.0)	135 (5.3)
	144	12 (12)	OFNR	17.8 (0.70)	252 (169)	4448 (1000)	1335 (300)	267 (10.5)	178 (7.0)
			OFNP	17.7 (0.70)	300 (202)	4448 (1000)	1335 (300)	255 (10.1)	170 (6.7)

XG OM3 & OM4 Multimode Optical Fiber Connectivity Information

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Optical Fiber Connector Termination Comparison Chart

		LightCrimp Plus LC, SC, ST	Epoxy/Polish LC, SC, ST
Termination Technology	Epoxy Required	NO	YES
	Polish Required	NO	YES
	Crimp Required	YES	YES
Setup Time	(Each Location)	< 2 Minutes	< 12 Minutes
Installation Time	(Each Fiber)	~ 1 Minute	7 – 25 Minutes
Connector Cost	(Relative)	Higher	Lower
Installation Labor Cost	(Relative)	Lower	Higher
Tool Kit Cost	(Relative)	Lower	Higher
Skill Level	(Relative)	Lower	Higher
Training Time	(Relative)	Short	High

NOTE: Entries for time and cost are estimates and relative comparisons. Actual results will vary depending on experience level and conditions at time of termination.

Jack, Plug and Insert Compatibility List

Description		Part Number	SL Series MT-RJ and MT-RJ SECURE Outlet Jacks	MT-RJ and MT-RJ SECURE Patch Panel Jacks	LightCrimp Plus			Epoxy/Polish		
					LC	SC	ST	LC	SC	ST
SL Series Modules	2-Port	1116409	X	–	–	–	–	–	–	–
	2-Port	1116406	X	–	–	–	–	–	–	–
	3-Port	1116408	X	–	–	–	–	–	–	–
	Duplex SC, Single-mode	1375306	–	–	–	X	–	–	X	–
	Duplex SC, Multimode	1375123	–	–	–	X	–	–	X	–
	Duplex SC to ST, Multimode	1375241	–	–	–	X	X	–	X	X
SL Series Inserts	ST, Multimode	1339123	–	–	–	–	X	–	X	X
	ST, Single-mode	1479181	–	–	–	–	X	–	–	X
	LC Duplex, Multimode	1435735	–	–	X	–	–	X	–	–
	LC Duplex, Single-mode	1435799	–	–	X	–	–	X	–	–
	MT-RJ SL Series Housing, Single-mode/Multimode	1374416	X*	X	–	–	–	–	–	–
	HIDEAWAY and HIDEOUT SC Duplex, Multimode	5504640	–	–	–	X	–	–	X	–
HIDEAWAY and HIDEOUT	SC Duplex to Dual ST, Multimode	5504663	–	–	–	X	X	–	X	X
HIDEAWAY and HIDEOUT	Dual ST, Multimode	504662	–	–	–	–	X	–	–	X
HIDEAWAY and HIDEOUT	MT-RJ Parallel Dress Clips, 1-Port	1374206	X**	X	–	–	–	–	–	–
HIDEAWAY and HIDEOUT	MT-RJ Parallel Dress Clips, 2-Port	1374205	X**	X	–	–	–	–	–	–
Surface Mount Inserts	1-Port	1116098	X	–	–	–	–	–	–	–
Surface Mount Inserts	2-Port	557775	X	–	–	–	X	–	–	X
Surface Mount Inserts	2-Port	557350	–	–	–	–	–	–	–	–
Universal Office Box Inserts	ST, Multimode	1479495	–	–	–	–	X	–	–	X
ACO Dual-Port Faceplate	Dual - SC Duplex, Multimode	503662	–	–	–	X	–	–	X	–
ACO Dual-Port Faceplate	Quad - ST, Multimode	502604	–	–	–	–	X	–	–	X
ACO Dual-Port Faceplate	Dual - ST, Multimode	502604	–	–	–	–	X	–	–	X
AFWM Flush Faceplates	Dual - SC Duplex, Multimode	557322	–	–	–	X	–	–	X	–
AFWM Flush Faceplates	Quad - ST, Multimode	557474	–	–	–	–	X	–	–	X
Optical Fiber MUO Mod	MT-RJ Jack, Single-mode/Multimode	1375347	X**	X	–	–	–	–	–	–
Optical Fiber MUO Mod	SC Duplex, Multimode	406818	–	–	–	X	–	–	X	–
Optical Fiber MUO Mod	SC Duplex to Dual ST, Multimode	406819	–	–	–	X	X	–	X	X
Optical Fiber MUO Mod	Dual ST, Multimode	406820	–	–	–	–	X	–	–	X

*Note: SL Series MT-RJ Outlet Jacks come with SL Series MT-RJ Housing.

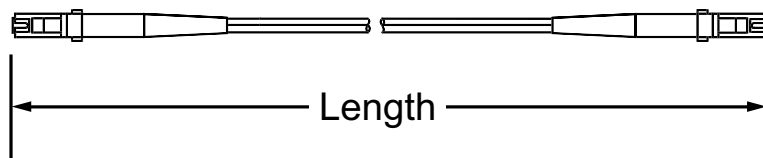
**Note: SL Series Housing is not used when using SL Series MT-RJ Outlet Jacks with MT-RJ Parallel Dress Clips or MT-RJ Jack MUO Modules.

XG OM3 & OM4 (50/125 μm) Multimode

Jack, Plug and Insert Compatibility List

Test Description	FOTP*	Requirement
Visual and Mechanical Inspection:	MT-RJ 13	TIA/EIA-604-12 (FOCIS 12)
Visual and Mechanical Inspection:	SC 13	TIA/EIA-604-3 (FOCIS 3)
Visual and Mechanical Inspection:	ST 13	TIA/EIA-604-2 (FOCIS 2)
Visual and Mechanical Inspection:	LC 13	TIA/EIA-604-10 (FOCIS10)
Attenuation	34	< 0.75 dB
Return Loss	107	< -20 dB
Low Temperature (0° C for 4 days)	188	< 0.3 dB change
Temperature Life (55° C for 14 days)	7	< 0.3 dB change
Humidity (90 to 95% @ 40° C for 4 days)	5	< 0.3 dB change
Impact (8 drops from 1.8 m)	2	< 0.75 dB IL, < -20 dB RL
Durability (500 cycles)	21	< 0.75 dB IL, < -20 dB RL
Cable Retention (0° and 90°)	6	< 0.75 dB IL, < -20 dB RL
Flex (100 cycles)	1	< 0.75 dB IL, < -20 dB RL
Twist (10 cycles)	36	< 0.75 dB IL, < -20 dB RL

Optical Fiber Cable Assembly Length Reference



Meter to Foot and Inch Reference

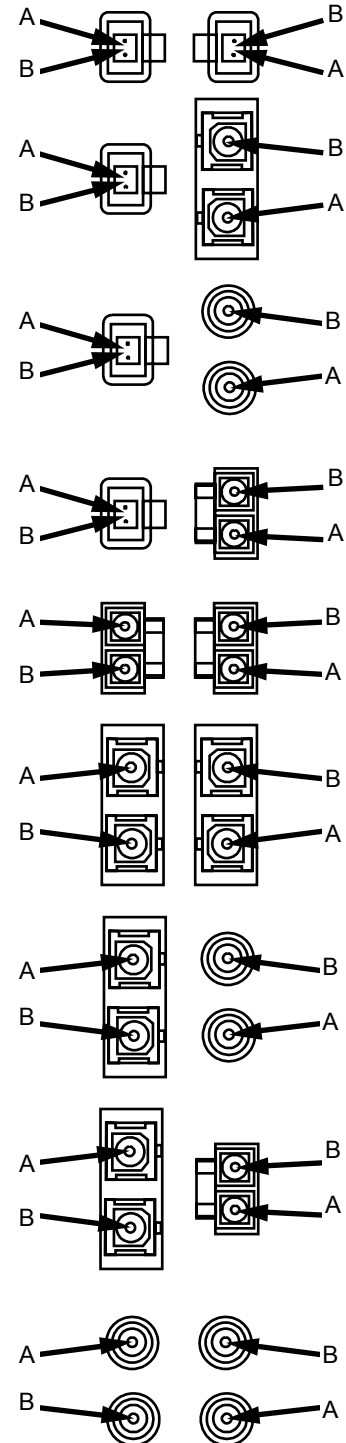
Length in Meters	Length in Feet	Length in Inches
1	3.28	39.37
2	6.56	78.74
3	9.84	118.11
4	13.12	157.48
5	16.40	196.85
6	19.68	236.21
7	22.96	275.59
8	26.25	314.96
9	29.52	354.33
10	32.80	393.70
20	65.62	787.40
30	98.42	1181.10
40	131.23	1574.80
50	164.04	1968.50
60	196.85	2362.20
70	229.66	2755.90
80	262.47	3149.60
90	295.27	3543.30
100	328.08	3937.00
110	360.89	4330.69
120	393.70	4724.39
130	426.51	5118.09
140	459.32	5511.79
150	492.12	5905.49
160	524.93	6299.19
170	557.74	6692.89
180	590.55	7086.59
190	623.36	7480.29
200	656.17	7873.99

Note: Conversion chart is for reference only and does not imply actual assembly length.

Fiber Polarity

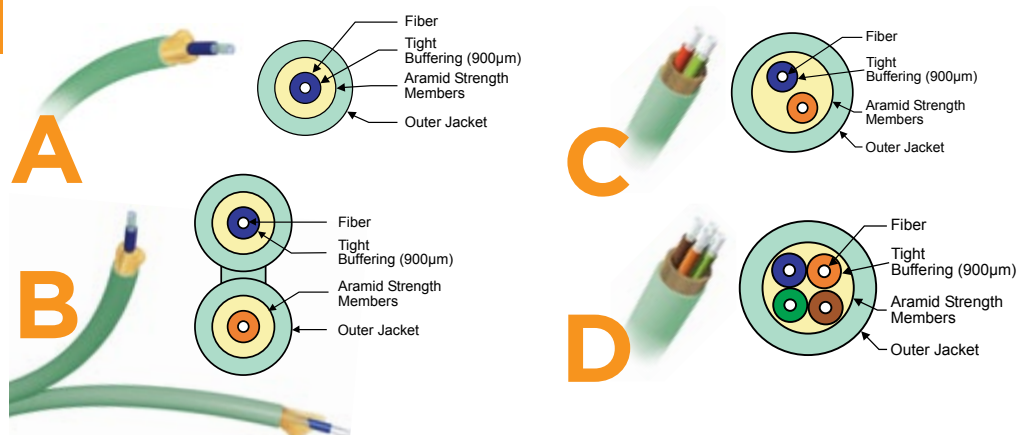
Fiber Color	End 1 Connector	End 2 Connector
White	A	B
Blue	B	A

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XG OM3 & OM4 Multimode Optical Fiber Interconnect Cable

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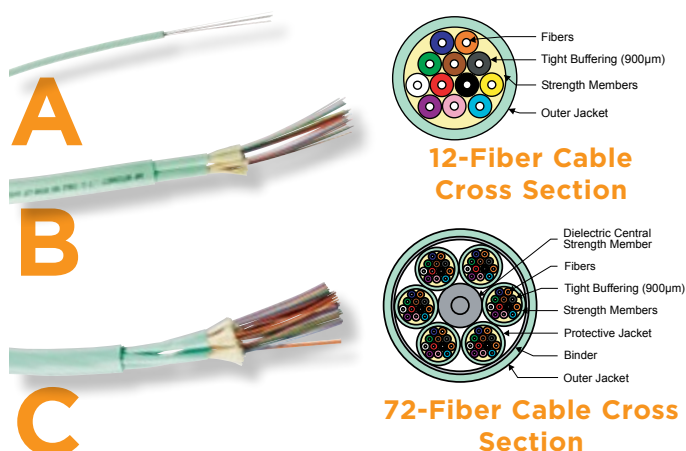


- Suitable for direct termination with epoxy/polish, LightCrimp, LightCrimp PLUS, and MT-RJ jacks for use in pigtails, and patch cords
- Simplex and zipcord cables are additionally suitable for use in internal equipment connections
- Aramid yarn reinforcement
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Outer jacket color: aqua
- Hybrid cables and other jacket colors are available
- See Customer Specification 114-92001 at www.ampnetconnect.com for additional information



Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Figure	XG OM3 Riser (OFNR)	XG OM3 Plenum (OFNP)	XG OM4 Riser (OFNR)	XG OM4 Plenum (OFNP)
Simplex (2.0mm)	1	1 (1)		3-1553406-9	3-1553407-9	4-1553406-9	4-1553407-9
Simplex (2.9mm)	1	1 (1)	A	3-1553408-9	3-1553409-9	4-1553408-9	4-1553409-9
Zipcord (2.0mm)	2	2 (1)		3-1553410-9	3-1553411-9	4-1553410-9	4-1553411-9
Zipcord (2.9mm)	2	2 (1)	B	3-1553412-9	3-1553413-9	4-1553412-9	4-1553413-9
Dual (2.9 mm)	2	1 (2)	C	3-1553414-9	3-1553415-9	4-1553414-9	4-1553415-9
Dual (4.8 mm)	2	1 (2)		3-1553416-9	3-1553417-9	4-1553416-9	4-1553417-9
Quad (4.8 mm)	4	1 (4)	D	3-1553418-9	3-1553419-9	4-1553418-9	4-1553419-9

XG OM3 & OM4 Multimode Optical Fiber Distribution Cable



- Suitable for horizontal and in-building backbone cabling and for direct termination with epoxy/polish, LightCrimp, LightCrimp PLUS and MT-RJ jacks
- Strippable 900 μm tight buffer coating allows for easy connectorization
- TIA color-coded fibers for easy identification
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Outer jacket color: aqua
- Hybrid cables and other jacket colors are available
- See Customer Specification 114-92000 at: www.ampnetconnect.com for additional information

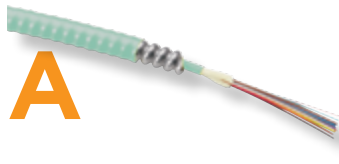


Fiber Count	Unit Count Unit (Fibers/Unit)	Figure	XG OM3 Riser (OFNR)	XG OM3 Plenum (OFNP)	XG OM4 Riser (OFNR)	XG OM4 Plenum (OFNP)
6	1 (6)	A	3-1553307-9	3-1553308-9	4-1553307-9	4-1553308-9
8	1 (8)		3-1553309-9	3-1553310-9	4-1553309-9	4-1553310-9
12	1 (12)		3-1553311-9	3-1553312-9	4-1553311-9	4-1553312-9
	1 (24)		3-1553313-9	3-1553314-9	4-1553313-9	4-1553314-9
24	2 (12)	B	3-1553315-9	3-1553316-9	4-1553315-9	4-1553316-9
	4 (6)		3-1553317-9	3-1553318-9	4-1553317-9	4-1553318-9
36	6 (6)		3-1553319-9	3-1553320-9	4-1553319-9	4-1553320-9
48	4 (12)	C	3-1553321-9	3-1553322-9	4-1553321-9	4-1553322-9
72	6 (12)		3-1553323-9	3-1553324-9	4-1553323-9	4-1553324-9
96	8 (12)		3-1553325-9	3-1553326-9	4-1553325-9	4-1553326-9
144	12 (12)		3-1553327-9	3-1553328-9	4-1553327-9	4-1553328-9

XG OM3 & OM4 (50/125 μm) Multimode



XG OM3 & OM4 Multimode Interlocking Armor Optical Fiber Distribution Cable

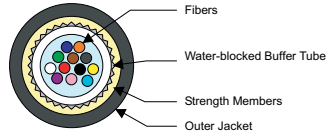
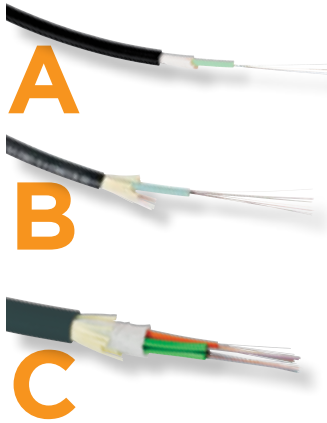


- Robust construction provides extra protection for optical fibers
- Interlocking armor enhances flexibility
- Lightweight aluminum armor simplifies handling
- Installer-friendly plenum rated over-jacketing makes cable pulls easier
- Outer/over jacketing color: aqua
- Hybrid cables and other jacket colors are available
- Pending local codes, may eliminate the need for innerduct
- OFCP (Plenum) rated
- TIA Color Coded fibers
- Strippable 900 μm tight buffer coating allows for easy connectorization
- Indoor/Outdoor and specialty versions available

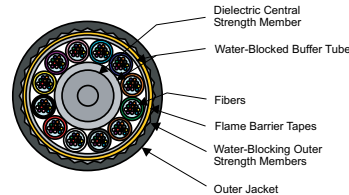
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Fiber Count	Unit Count Units (Fibers/Unit)	Figure	UL/NEC Ratings	XG OM3	XG OM4
6	1 (6)	A	Plenum (OFCP)	3-1777121-7	7-1777121-7
12	1 (12)		Plenum (OFCP)	3-1777117-7	7-1777117-7
24	1 (24)		Plenum (OFCP)	3-1553420-9	4-1553420-9
	2 (12)		Plenum (OFCP)	3-1777122-7	7-1777122-7
48	4 (12)		Plenum (OFCP)	3-1777123-7	7-1777123-7
72	6 (12)		Plenum (OFCP)	3-1777124-7	7-1777124-7

XG OM3 & OM4 Multimode Optical Fiber Indoor/Outdoor Cable



12-Fiber Cable Cross Section



144-Fiber Cable Cross Section

- Suitable for in-building and inter-building backbone cabling
- Can eliminate the need for a transition point and splicing when entering buildings - go directly from outdoors into building riser or plenum spaces
- Water-blocked buffer tube for water penetration protection
- Flame-retardant UV-protected jacket for harsh outdoor environments
- All-dielectric construction
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Water-blocked buffer tube for water penetration protection
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - Outer Jacket Color is Black for all Fiber Types
 - Hybrid cables and other jacket colors are available
 - Reverse oscillating lay construction for easy midspan access
 - Dry water blocking technology
 - TIA color-coded fibers in TIA color-coded tubes for easy identification
- See Customer Specification 114-92002 at: www.ampnetconnect.com for additional information



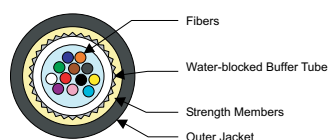
Cable Type	Fiber Count	Unit Count Unit (Fibers/Unit)	Figure	XG OM3 Riser (OFNR)	XG OM3 Plenum (OFNP)	XG OM4 Riser (OFNR)	XG OM4 Plenum (OFNP)
Single Loose Tube	6	1 (6)	A	6-1553342-4	6-1553343-4	6-1553342-5	6-1553343-5
	8	1 (8)		6-1553344-4	6-1553345-4	6-1553344-5	6-1553345-5
	12	1 (12)	B	6-1553346-4	6-1553347-4	6-1553346-5	6-1553347-5
Stranded Loose Tube	24	2 (12)		6-1553348-4	6-1553349-4	6-1553348-5	6-1553349-5
	36	3 (12)		6-1553350-4	6-1553351-4	6-1553350-5	6-1553351-5
	48	4 (12)	C	6-1553352-4	6-1553353-4	6-1553352-5	6-1553353-5
	72	6 (12)		6-1553354-4	6-1553355-4	6-1553354-5	6-1553355-5
	96	8 (12)		6-1553356-4	6-1553357-4	6-1553356-5	6-1553357-5
	144	12 (12)		6-1553358-4	6-1553359-4	6-1553358-5	6-1553359-5

XG OM3 & OM4 Multimode Optical Fiber Outside Plant (OSP) Cable

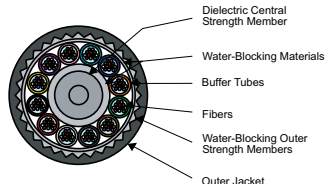
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A



12-Fiber Cable Cross Section



144-Fiber Cable Cross Section

- Suitable for inter-building backbone cabling (aerial, duct or direct burial)
- Dry water-blocking technology
- UV-protected jacket for harsh outdoor environment
- Low friction jacket for ease of pulling through ducts
- All-dielectric construction
- Outer Jacket Color is Black
- See Customer Specification 114-92003 at: www.ampnetconnect.com for additional information
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - Reverse oscillating lay construction for easy midspan access
 - TIA color-coded fibers and buffer tubes for easy identification

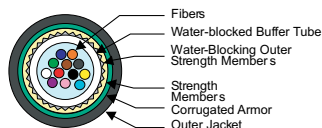
Fiber Count	Unit Count Units (Fibers/Unit)	Figure	XG OM3	XG OM4
4	1 (4)		6-1553386-4	6-1553386-5
6	1 (6)		6-1553387-4	6-1553387-5
8	1 (8)		6-1553388-4	6-1553388-5
12	1 (12)		6-1553389-4	6-1553389-5
24	2 (12)		6-1553390-4	6-1553390-5
36	3 (12)		6-1553391-4	6-1553391-5
48	4 (12)		6-1553392-4	6-1553392-5
72	6 (12)		6-1553393-4	6-1553393-5
96	8 (12)		6-1553394-4	6-1553394-5
144	12 (12)	A	6-1553395-4	6-1553395-5

XG OM3 & OM4 Multimode Optical Fiber Outside Plant Armored (OSPA) Cable

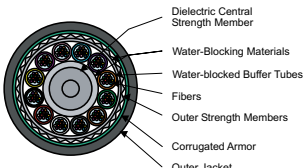


A

B



12-Fiber Cable Cross Section



144-Fiber Cable Cross Section

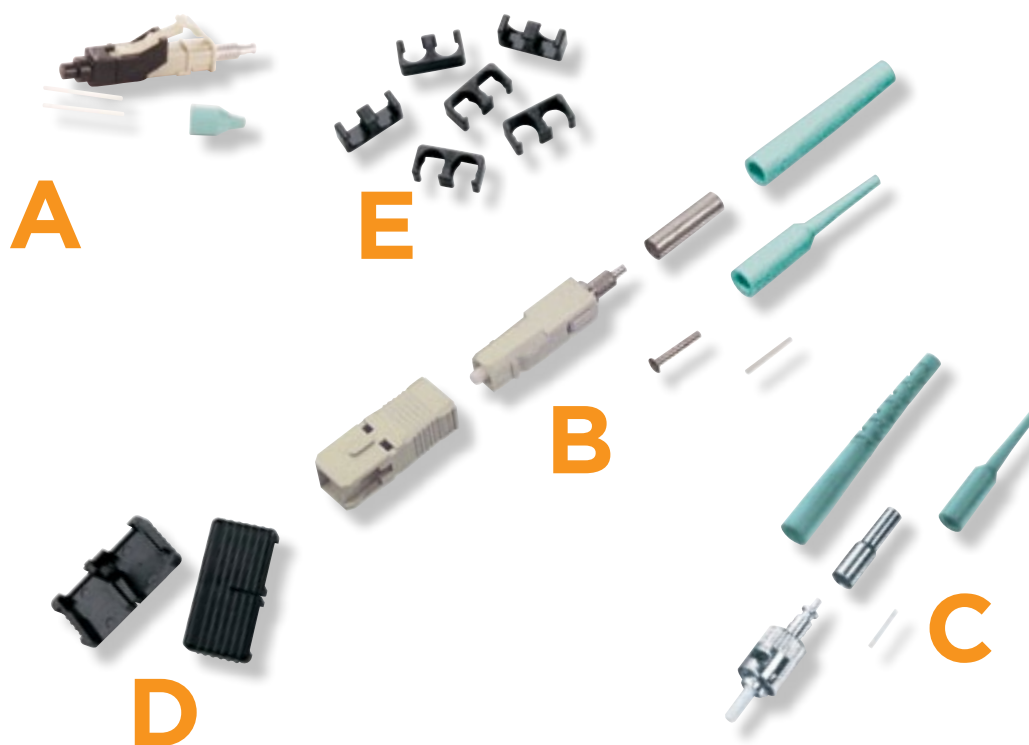
- Suitable for inter-building backbone cabling (aerial, duct or direct buried)
- Dry water-blocking technology
- UV-protected jacket for harsh outdoor environment
- Low friction jacket for ease of pulling through ducts
- Corrugated steel tape armor for rugged environments and rodent protection
- Outer Jacket Color is Black for all Fiber Types
- See Customer Specification 114-92003 at: www.ampnetconnect.com for additional information
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - TIA color-coded fibers and buffer tubes for easy identification
 - Reverse oscillating lay construction for easy midspan access
 - Hybrid cables (with single-mode and multimode fibers) are available to provide a built-in migration path for future applications that will require single-mode fibers

Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Figure	XG OM3	XG OM4
Single Loose Tube	4	1 (4)		6-1553396-4	6-1553396-5
	6	1 (6)	A	6-1553397-4	6-1553397-5
	8	1 (8)		6-1553398-4	6-1553398-5
	12	1 (12)		6-1553399-4	6-1553399-5
Stranded Loose Tube	24	2 (12)		6-1553400-4	6-1553400-5
	36	3 (12)		6-1553401-4	6-1553401-5
	48	4 (12)	B	6-1553402-4	6-1553402-5
	72	6 (12)		6-1553403-4	6-1553403-5
	96	8 (12)		6-1553404-4	6-1553404-5
	144	12 (12)		6-1553405-4	6-1553405-5

XG OM3 & OM4 (50/125 μm) Multimode

XG OM3 & OM4 Multimode LightCrimp PLUS Connectors (No-epoxy/No-polish)

07

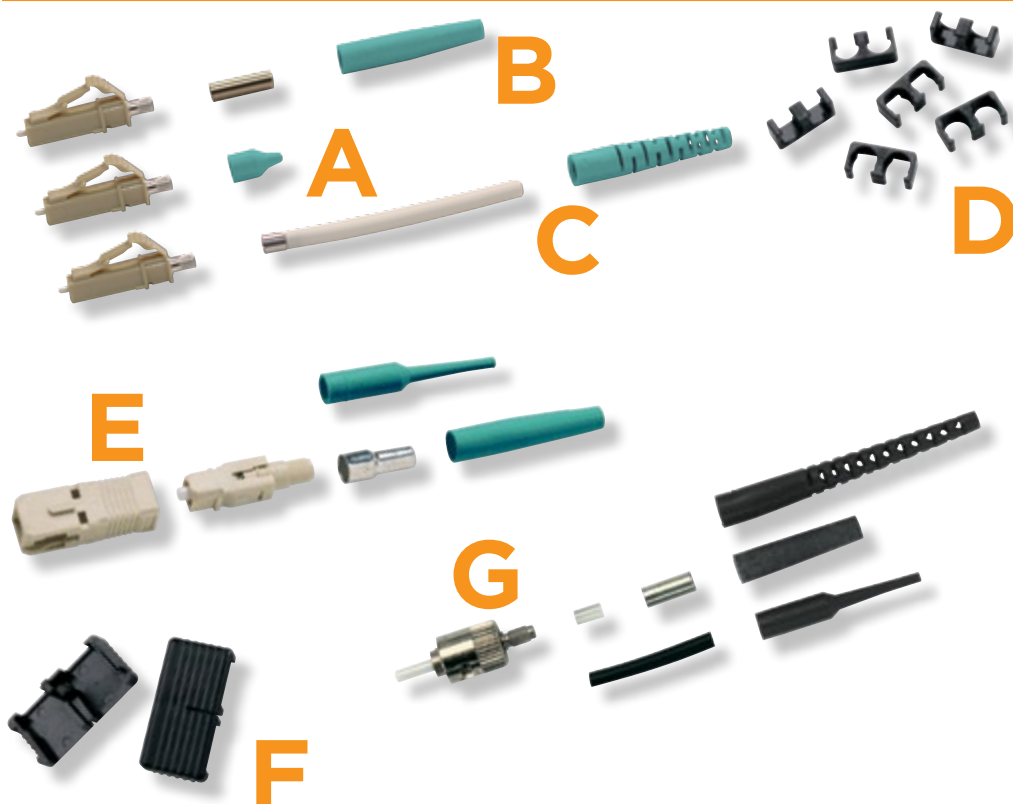


- Easy installation:
- No epoxy, no polishing
- No bench tool required
- Strip, cleave, and crimp
- Match fiber type of cable to fiber type of LightCrimp PLUS
- Mates with standard couplers, adapters, and adapter plates
- LC small form factor design is half the size of SC
- Select appropriate part number for termination to:
 - 900 μm tight-buffered fiber or 250 μm coated fiber
 - 1.6 – 2.0 mm jacketed fiber
 - 3 mm jacketed fiber
- LC connector clip turns simplex connectors into duplex connectors and allows for polarity correction after termination
- Termination tool kits in Chapter 22

Connector Type	Housing Color	Boot Color	Used With	Figure	Part Number
LC Simplex	Beige	Aqua	900 μm buffered and 250 μm coated fibers	A	6754483-4
			1.6 to 2.0 mm Jacketed Cable		1918627-3
SC Simplex	Beige	Aqua	900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable	B	6588291-2
ST	Metallic	Aqua	900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable	C	6278082-2
Duplex LC Clip, package of 6	Black	–	Simplex LC Connectors	D	1754371-2
1/2 Duplex SC Clip (two are required to make a complete clip)	Black	–	Simplex SC Connectors	E	6348522-1

XG OM3 & OM4 Multimode Epoxy/Polish Connectors

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- Each connector kit comes with accessories needed to terminate to 250 μm fiber, 900 μm tight-buffered fiber, 900 μm easy-strip, buffer tube splitter kits, 2 mm or 3 mm cable (select appropriate part number)
- Suitable for use with heat-cured or anaerobic (quick cure) adhesive
- See Instruction Sheet for recommended anaerobic adhesive
- Mates with standard couplers, adapters, and adapter plates
- LC small form factor design is half the size of SC
- Pre-radiused ceramic ferrules for easy polishing
- Duplex SC can be assembled using two Simplex SC connectors and one duplex clip
- Boot type and coupling nut options (select appropriate part number)

Description	Housing Color	Boot Color	Used With	Figure	Part Number
LC Simplex	Beige	Aqua	900 μm buffered and 250 μm coated fibers	A	1918385-3
			1.6 to 2 mm Jacketed Cable	B	1918267-3
			3.0 mm Jacketed Cable	C	1918375-3
Duplex LC Clip, package of 6	Black	—	Simplex LC Connectors	D	1754371-2
SC Simplex	Beige	Aqua	900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable	E	1-5503948-1
			3 mm Jacketed Cable		1-5503948-0
			900 μm buffered and 250 μm coated fibers	E	5504932-5
			2 mm Jacketed Cable		5504931-5
½ Duplex SC Clip (two are required to make a complete clip)	Black	—	Simplex SC Connectors	F	6348522-1
ST	Black	Black	900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable		5503571-3
			900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable	G	5492458-1
	Metalic	Black	3 mm Jacketed Cable		1-5501380-6
			900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable	G	5501380-1

XG OM3 & OM4 (50/125 μm) Multimode



XG OM3 & OM4 Multimode MT-RJ Jacks (No-epoxy/No-polish)

07



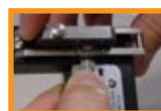
MT-RJ Patch Panel Jacks

MT-RJ Outlet Jack

SL Series Housing (Gray)



Strip



Cleave



Lock

- Patch panel jacks terminate either two 900 μm tight-buffered fibers or two 250 μm coated fibers (select appropriate part number)
- Outlet jacks terminate two 900 μm tight-buffered fibers
- Match fiber type of cable to fiber type of MT-RJ Jack
- No epoxy, no polishing, no crimping
- Two fibers in one ferrule
- Jacks can be reterminated improving yield
- Tunable
- No bench tool required
- Small form factor design is half the size of SC duplex
- Jack design eliminates need for MT-RJ Coupler
- Each Outlet Jack part number includes:
 - One MT-RJ jack
 - One actuation tool
 - One bend-limiting boot
 - One SL Series Housing - allows use in any faceplate or outlet that accepts SL Series Jacks
- Each patch panel jack part number includes:
 - Six patch panel jacks
 - Two actuation tools
 - One Fiber guide
 - One Icon wheel
- SL Series housing and bend limiting boot are also available separately

Description	Jack Color	SL Series Housing Color	For Use With	
			900 μm Tight-buffered Fibers	250 μm Coated Fibers
MT-RJ Patch Panel Jack	Gray	—	6588880-3	6278303-4
MT-RJ Outlet Jack	Gray	Gray	1-6278414-2	—

XG OM3 & OM4 Multimode MT-RJ Jack Accessories

07

A



B



- Parallel Dress Clips:
 - 1-Port clip holds one MT-RJ Jack (sold separately)
 - 2-Port clip holds two MT-RJ Jacks (sold separately)
 - Allow use of MT-RJ Jacks in faceplates and outlets that hold flanged optical fiber adapters



- Can be used with HIDEAWAY and HIDEOUT outlets
- Bend Limiting Boots:
 - Compatible with all MT-RJ Jacks
 - Comes in a package of six
 - Protects fiber transition at back of MT-RJ Jack

C



D



- SL Series housing easily snap into SL Series Modules, mounting straps, patch panels, and faceplates
- SL Series housing accepts one MT-RJ Jack sold separately
- MT-RJ Outlet Jacks not included with any accessory listed here

Description		Package Quantity	Figure	SL Series Housing Color	Part Number
Parallel Dress Clip	1-Port (Accepts 1 MT-RJ Jack)	6	A	—	1374206-1
	2-Port (Accepts 2 MT-RJ Jacks)	3	B	—	1374205-1
Bend Limiting Boot	Black	6	C	—	6374208-4
				Almond	1374416-1
				Black	1374416-2
				White	1374416-3
				Gray	1374416-4
				Orange	1374416-5
				Blue	1374416-6
				Red	1374416-7
				Yellow	1374416-8
				Green	1374416-9
				Violet	1-1374416-0
				Electrical Ivory	1-1374416-1
				Rose	2-1374416-3
SL Series Housing	1-Port (Accepts 1 MT-RJ Jack)	1	D	Aqua	2-1374416-4
				Brown	2-1374416-5
				Slate	2-1374416-6

LightCrimp Splice

A



B



- Terminates 250 μm coated, 900 μm tight-buffered, and 2.0 mm jacketed fibers
- Use with multimode and single-mode 125 μm diameter fibers
- No epoxy, set-up, or workstation required
- Use Termination Tool Kit part number 1553212-1, See Chapter 22
- Splice Performance Characteristics:
 - Attenuation: Typical 0.1 dB
 - Return Loss: (at ambient: 18 to 28° C) >20 dB Multimode >35 dB Single-mode
 - Operating Temperature: -25 to 70° C
 - Tensile Retention:
 - 250 μm coated: 2.0 N
 - 900 μm buffered: 3.0 N
 - Jacketed: 50 N



Insert First Fiber and Complete Buffer Crimp



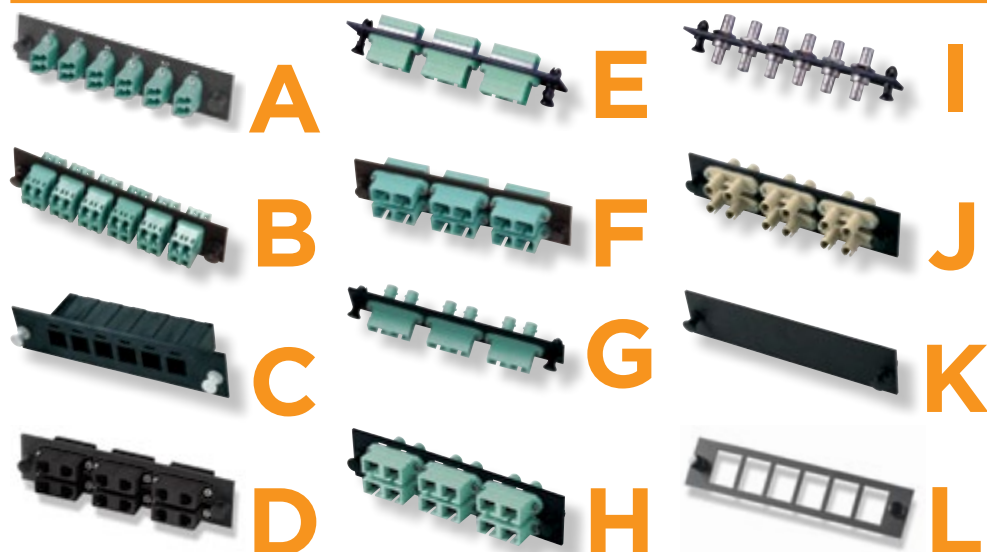
Insert Second Fiber and Actuate Crimp



Complete Second Buffer Crimp and Remove Splice from Tool

Description	Figure	Part Number
LightCrimp Splice for 250 μm Coated and 900 μm tight-buffered Fibers	A	1985374-1
LightCrimp Splice for 2.0 mm Jacketed Fiber	B	1985805-1

XG OM3 & OM4 Multimode Snap-in Adapter Plates

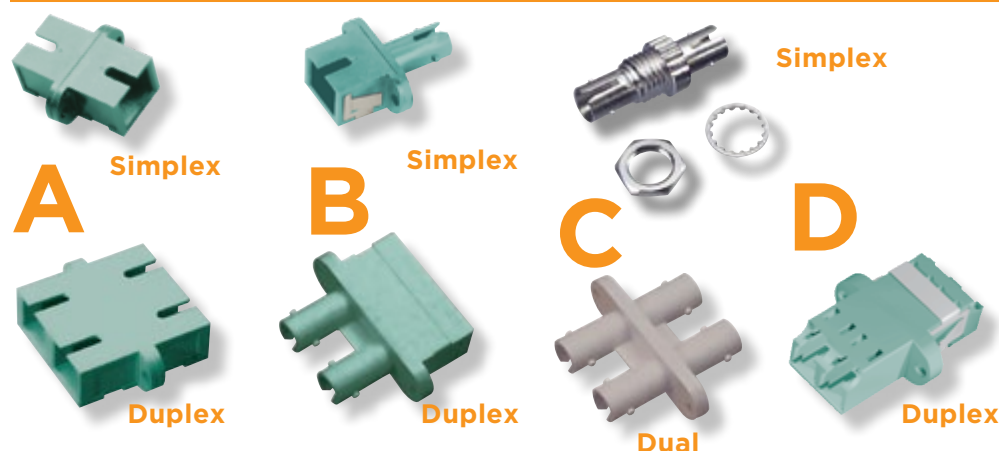


- All Snap-in Adapter Plates fit AMP NETCONNECT unloaded Optical Fiber Enclosures, see Chapter 15
- MT-RJ Jack Adapter Plates:
 - Hold up to six (6) MT-RJ (standard or secure) Jacks or Pigtail Jack Cable Assemblies
 - Accepts labeling icons
- MT-RJ Plug Adapter Plates hold up to twelve (12) MT-RJ Plugs (standard only)
- Package quantity = 1 per pack
- SL Series multimedia adapter plates accept SL Series jacks and inserts

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Coupling Adapter	Fibers	Duplex Ports	Coupler Count	Adapter Color	Figure	Part Number
LC Duplex	12	6	6	Aqua	A	1374463-5
	24	12	12	Aqua	B	1435516-5
MT-RJ, Holds 6 Jacks	12	6	—	—	C	1278328-3
MT-RJ, 12 Plugs	24	12	—	Black	D	1435440-2
SC Simplex	6	3	3	Aqua		559517-8
	6	3	3	Aqua	E	559558-6
SC Duplex	12	6	6	Aqua	F	559596-6
	6	3	3	Aqua	G	559601-5
SC Duplex to Dual ST	12	6	6	Aqua	H	1278368-3
	6	3	6	Metallic	I	559557-1
ST	12	6	6	Beige	J	1278567-1
MPO	—	—	6	Black		1374598-1
Blank	—	—	—	—	K	559523-1
SL Series Multimedia Adapter Plate	—	—	—	—	L	1479506-1

XG OM3 & OM4 Multimode Couplers & Adapters

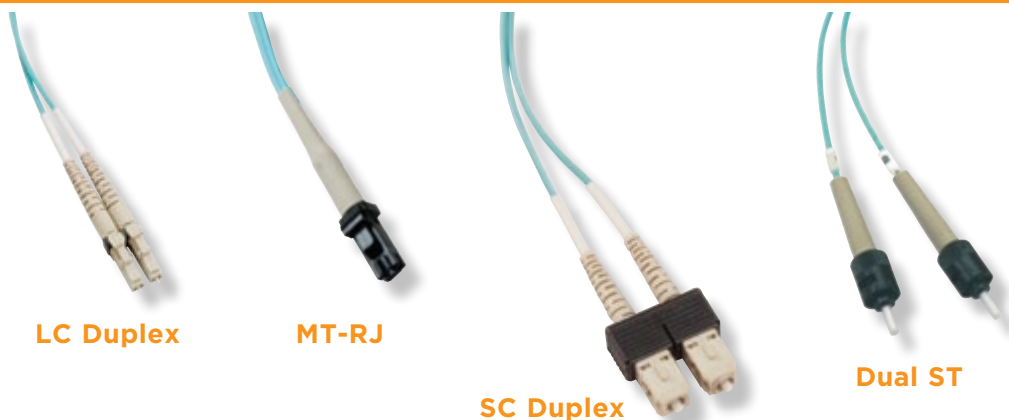


- MT-RJ Couplers mate multimode or single-mode MT-RJ Plugs
- Duplex coupler mates four MT-RJ Plugs (4-fibers total, 2-fibers/mated pair)
- Simplex coupler mates two MT-RJ Plugs (2-fibers total, 2-fibers/mated pair)
- Mounting screws are available for couplers with mounting tabs (flanged)
- FOCIS - compliant designs

Description	Color	Figure	Simplex	Duplex
MT-RJ Coupler	Almond		1278017-1	6374906-1
SC Coupler	Aqua	A	2-5502632-4	2-5502776-6
SC to ST Coupling Adapter	Aqua	B	2-5502780-1	1-5503137-9
ST Coupler	Metallic/Beige	C	501381-1	504662-2
LC Coupler	Aqua	D	—	1-6457567-6

XG OM3 & OM4 Multimode LC Cable Assemblies

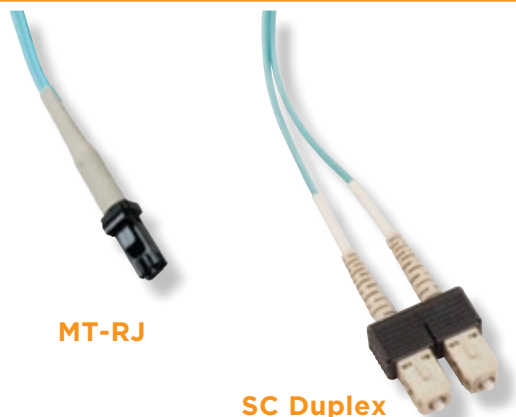
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- LC, SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Each MT-RJ Connector houses two fibers
- Other lengths available, see customer drawings for details
- Aqua cable jacketing

Connector		Fiber Type	Length				
End 1	End 2		1 m	2 m	3 m	5 m	10 m
LC Duplex	LC Duplex	XG OM3 Multimode	6828317-1	6828317-2	6828317-3	6828317-5	1-6828317-0
		XG OM4 Multimode	1553446-1	1553446-2	1553446-3	1553446-5	1-1553446-0
	MT-RJ	XG OM3 Multimode	1907440-1	1907440-2	1907440-3	1907440-5	1-1907440-0
		XG OM4 Multimode	1907438-1	1907438-2	1907438-3	1907438-5	1-1907438-0
	SC Duplex	XG OM3 Multimode	1553447-1	1553447-2	1553447-3	1553447-5	1-1553447-0
		XG OM4 Multimode	1906839-1	1906839-2	1906839-3	1906839-5	1-1906839-0

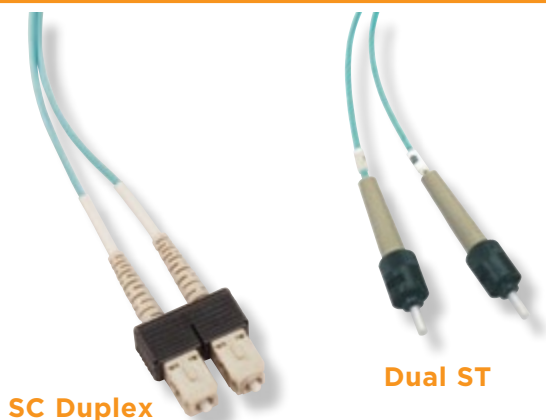
XG OM3 Multimode MT-RJ Cable Assemblies



- SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Each MT-RJ Connector houses two fibers
- Other lengths available, see customer drawings for details
- Aqua cable jacketing

Connector		Fiber Type	Length				
End 1	End 2		1 m	2 m	3 m	5 m	10 m
MT-RJ	MT-RJ	XG OM3 Multimode	6588572-1	6588572-2	6588572-3	6588572-5	1-6588572-0
	SC Simplex	XG OM3 Multimode	6588573-1	6588573-2	6588573-3	6588573-5	1-6588573-0
	SC Duplex	XG OM3 Multimode	1907429-1	1907429-2	1907429-3	1907429-5	1-1907429-0

XG OM3 Multimode SC Cable Assemblies



- SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Other lengths available, see customer drawings for details
- Aqua cable jacketing

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Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
SC Duplex	SC Duplex	6828151-1	6828151-2	6828151-3	6828151-5	1-6828151-0
	ST (Dual)	1907339-1	1907339-2	1907339-3	1907339-5	1-1907339-0

XG OM3 Multimode ST Cable Assemblies



- Connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Other lengths available, see customer drawings for details
- Aqua cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
ST (Dual)	ST (Dual)	1907557-1	1907557-2	1907557-3	1907557-5	1-1907557-0

XG OM3 Multimode Pigtail (Single-Ended) Cable Assemblies

- Splice-able pigtail assemblies
- 250 μm coated fiber in protective 900 μm tubing
- Compatible with fusion or mechanical splices
- Each MT-RJ Connector houses two fibers
- MT-RJ Plugs are pinned

Connector End	Cable Type	Length		
		1 m	2 m	3 m
LC Simplex	2.0 mm Jacketed With One 250 μm coated fiber in protective 900 μm tubing	6754402-1	—	—
MT-RJ Jack, Black Housing	Dual 250 μm coated fibers in 900 μm tubing	1938008-1	1938008-2	1938008-3
MT-RJ Plug, Black	Dual 250 μm coated fibers in 900 μm tubing	1985275-1	1985275-2	1985275-3

XG (50 µm) Multimode LC Test Kits

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- Test Kits includes:
 - Cable Assemblies
 - LC Duplex Clips
 - Mandrels
 - Carrying case
- Test Kits for LC SECURE Connector Systems also available
- See "FIELD TESTING LC OPTICAL FIBER SYSTEMS" White Paper (available on-line at www.ampnetconnect.com) for test details

Description

Description	Part Number
For use with Dual Fiber Testers with SC Transmit and LC Recieve Ports	1828867-1
For use with Dual Fiber Testers with ST Transmit and LC Recieve Ports	1828867-2
For use with Dual Fiber Testers with LC Transmit and LC Recieve Ports	1828867-3

XG (50 µm) Multimode Replacement Components for LC Test Kits

- Assemblies are 3m in length
- Assemblies are Simplex style
- Cable Assemblies are riser (OFNR) rated

Description

Description	Part Number
Mandrels (Transmit side only)	1435119-1
LC Duplex Clips (pack of 6)	1754371-2
SC to LC Simplex Assembly, 3m	1907490-3
ST to LC Simplex Assembly, 3m	1907493-3
LC to LC Simplex Assembly, 3m	1907496-3

XG OM3 & OM4 Multimode MT-RJ OTDR Test Assemblies

- For use in testing with an OTDR test set
- All assemblies are 100m in length
- For XG OM3 and OM4 fiber testing, use standard 50 µm multimode products

Description

Description	Connector End 1	Connector End 2	Part Number
Launch Lead	MT-RJ	Dual SC Simplex	6588080-1
		Dual ST	6588078-1

XG OM3 & OM4 Multimode MT-RJ Loopbacks

Description

Description	Part Number
MT-RJ Loopback	6278357-1

XG OM3 & OM4 Multimode MT-RJ Test Kits



- Each test kit includes:
 - 1 - MT-RJ Adapter
 - 2 - MT-RJ (no pins) to SC simplex or ST cable assemblies
 - 1 - MT-RJ (with pins) to SC simplex or ST cable assembly
 - 1 - MT-RJ to MT-RJ cable assembly
 - 2 - Mandrels
 - 1 - Carrying case
- Test Kits for MT-RJ SECURE Connector Systems also available
- See "MT-RJ OPTICAL FIBER SYSTEMS TESTING" White Paper (available on-line at www.ampnetconnect.com) for details
- For XG OM3 and OM4 fiber testing, use standard 50 µm multimode products

Equipment Transmit Port

Equipment Transmit Port	Part Number
SC	1278861-1
ST	1278861-2

Replacement Components for XG OM3 & OM4 Multimode MT-RJ Test Kits

- All assemblies are 4 m in length
- Pinned MT-RJ Cable Assemblies are used for testing only
- Cable Assemblies are riser-rated
- For XG OM3 and OM4 fiber testing, use standard 50 µm multimode products

Description

Description	Connector End 1	Connector End 2	Part Number
	Unpinned MT-RJ	Unpinned MT-RJ	6435096-2
	Unpinned MT-RJ	SC	6435092-2
Replacement Cable Assemblies	Unpinned MT-RJ	ST-style	6435094-2
	Pinned MT-RJ	SC	6435092-5
	Pinned MT-RJ	ST-style	6435094-5
Replacement Coupler	MT-RJ Plug	MT-RJ Plug	1278017-1
Replacement Mandrel	Set of two, for 50/125 µm Fibers	–	1435119-2



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50/125 μm OM2 Optical Fiber General Product Information02 – 05

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Optical Fiber Distribution Cable06

Interlocking Armor Optical Fiber Distribution Cable07

Optical Fiber Indoor/Outdoor Cable07

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50/125 µm OM2 Optical Fiber Cable Information

08

AMP NETCONNECT fiber optic cables contain fibers for use in optical fiber applications, including: local area networks (LANs), wide area networks (WANs), fiber to the curb (FTTC), fiber to the home (FTTH), fiber to the desk (FTTD), and others.

AMP NETCONNECT Optical Fiber Cables are tested and designed to the most recent applicable industry standards for premise cabling, network and telecommunications applications, including:

IEEE 802.3	Ethernet	Fast Ethernet	Gigabit Ethernet
10 Gigabit Ethernet	FDDI	ATM	Fibre Channel
Token Ring	ANSI/TIA-568	ISO 11801	ICEA-596
ICEA-640	ICEA-696	IEC 793-1	IEC 794-1
Telecordia GR-409-CORE	Telecordia GR-20-CORE		

50/125 µm OM2 Optical Fiber Performance

Gigabit Ethernet @ 850 nm	Gigabit Ethernet @ 1300 nm	10 Gigabit Ethernet @ 850 nm	10 Gigabit Ethernet @ 1300 nm
550 m	550 m	82 m	300 m

50/125 µm OM2 (850/1300 nm) Optical Fiber Cable Performance Specifications

Cable Type	Maximum Attenuation dB/km		OFL Bandwidth MHz·km		Laser Bandwidth MHz·km	
	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
Indoor Cables	3.5	1.5	500	500	—	—
Indoor/Outdoor and OSP Loose Tube Cables	3.5	1.5	500	500	—	—

Optical Fiber Cable Temperature Ranges

Cable Type	Condition	Riser	Plenum
		Storage	Storage
Interconnect (Tight Buffered) Cables	Storage	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)
	Operating	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
	Installation	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
Indoor, Distribution (Tight Buffered) Cables	Storage	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)
	Operating	-20°C to +70°C (-4°F to +158°F)	0°C to +70°C (32°F to +158°F)
	Installation	-10°C to +60°C (14°F to +140°F)	0°C to +60°C (32°F to +140°F)
Indoor/Outdoor Cables	Storage	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)
	Operating	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)
	Installation	-20°C to +60°C (-4°F to +140°F)	-0°C to +60°C (-32°F to +140°F)
Stranded Cables			
OSP (Loose Tube) Cables	Storage	-40°C to +70°C (-40°F to +158°F)	—
	Operating	-40°C to +70°C (-40°F to +158°F)	—
	Installation	-30°C to +60°C (-22°F to +140°F)	—

Optical Fiber Cable Technical Information

Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Diameter mm (in)	Weight kg/km (lb/kft)	Tensile Load N (lbf)		Bending Radius mm (in)	
					Installation	Long Term	Installation	Long Term
Outside Plant, Single Loose Tube	4	1 (4)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	6	1 (6)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	8	1 (8)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	12	1 (12)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
Outside Plant, Stranded Loose Tube	24	2 (12)	11.0 (0.43)	100 (67)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	36	3 (12)	11.0 (0.43)	93 (62)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	48	4 (12)	11.0 (0.43)	97 (65)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	72	6 (12)	11.9 (0.47)	130 (87)	2670 (600)	890 (200)	252 (9.9)	126 (5.0)
	96	8 (12)	13.6 (0.53)	158 (106)	2670 (600)	890 (200)	287 (11.3)	144 (5.6)
	144	12 (12)	17.6 (0.69)	252 (169)	2670 (600)	890 (200)	364 (14.3)	182 (7.2)
Outside Plant, Armored Single Loose Tube	4	1 (4)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	6	1 (6)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	8	1 (8)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	12	1 (12)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
Outside Plant, Armored Stranded Loose Tube	24	2 (12)	13.8 (0.55)	214 (144)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	36	3 (12)	13.8 (0.55)	218 (146)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	48	4 (12)	13.8 (0.55)	223 (150)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	72	6 (12)	14.8 (0.58)	265 (178)	2670 (600)	890 (200)	335 (13.2)	167 (6.6)
	96	8 (12)	16.7 (0.69)	307 (206)	2670 (600)	890 (200)	378 (14.9)	189 (7.4)
	144	12 (12)	21.4 (0.84)	498 (335)	2670 (600)	890 (200)	455 (17.9)	228 (9)

OM2 (50/125 μm) Multimode



Optical Fiber Cable Technical Information (Continued)

Cable Type	Fiber Count	Unit Count Units (Fibers/ Unit)	UL/NEC Ratings	Diameter mm (in)	Weight kg/km (lb/ kft)	Tensile Load N (lbf)		Bending Radius mm (in)	
						Installation	Long Term	Installation	Long Term
Interconnect, Simplex	1	1 (1)	OFNR	2.0 (0.08)	5 (3)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNP	2.0 (0.08)	6 (4)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNR	2.9 (0.11)	8 (5)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
			OFNP	2.9 (0.11)	9 (6)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
Interconnect, Zipcord	2	2 (1)	OFNR	2.0 (0.08) x 4.1 (0.16)	8 (5)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNP	2.0 (0.08) x 4.1 (0.16)	10 (7)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNR	2.9 (0.11) x 5.9 (0.23)	15 (10)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
			OFNP	2.9 (0.11) x 5.9 (0.23)	15 (10)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
Interconnect, Dual	2	1 (2)	OFNR	2.9 (0.11)	7 (5)	100 (22)	30 (7)	57 (2.2)	29 (1.1)
			OFNP	2.9 (0.11)	9 (6)	100 (22)	30 (7)	57 (2.2)	29 (1.1)
			OFNR	4.8 (0.3)	20 (13)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
			OFNP	4.8 (0.3)	30 (20)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
Interconnect, Quad	4	1 (4)	OFNR	4.8 (0.3)	25 (17)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
			OFNP	4.8 (0.3)	30 (20)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
Distribution	6	1 (6)	OFNR	5.2 (0.20)	29 (19)	660 (150)	198 (45)	114 (4.5)	57 (2.2)
			OFNP	4.8 (0.19)	24 (16)	440 (100)	132 (30)	110 (4.3)	55 (2.2)
	8	1 (8)	OFNR	5.7 (0.22)	24 (16)	660 (150)	198 (45)	136 (5.4)	68 (2.7)
			OFNP	5.0 (0.20)	26 (17)	440 (100)	132 (30)	110 (4.3)	55 (2.2)
	12	1 (12)	OFNR	6.0 (0.24)	37 (25)	660 (150)	198 (45)	128 (5)	64 (2.5)
			OFNP	5.7 (0.23)	46 (31)	440 (100)	132 (30)	128 (5)	64 (2.5)
	24	1 (24)	OFNR	8.0 (0.31)	61 (41)	1320 (300)	396 (90)	178 (7)	89 (3.5)
			OFNP	7.7 (0.30)	69 (46)	660 (150)	198 (45)	168 (6.6)	84 (3.3)
	24	2 (12)	OFNR	7.4 x 13.0 (0.29 x 0.51)	87 (58)	1320 (300)	396 (90)	284 (11.2)	142 (5.6)
			OFNP	7.0 x 12.4 (0.28 x 0.49)	92 (62)	660 (150)	198 (45)	264 (10.4)	132 (5.2)
	24	4 (6)	OFNR	13.4 (0.53)	180 (121)	1320 (300)	396 (90)	275 (10.8)	137 (5.4)
			OFNP	13.3 (0.52)	200 (134)	660 (150)	198 (45)	266 (10.5)	133 (5.2)
	36	6 (6)	OFNR	16.4 (0.65)	220 (148)	1320 (300)	396 (90)	342 (13.5)	171 (6.7)
			OFNP	16.0 (0.63)	255 (171)	660 (150)	198 (45)	327 (12.9)	164 (6.4)
	48	4 (12)	OFNR	16.0 (0.63)	250 (168)	1320 (300)	396 (90)	350 (13.8)	175 (6.9)
			OFNP	15.2 (0.60)	202 (136)	660 (150)	198 (45)	312 (12.3)	156 (6.1)
	72	6 (12)	OFNR	18.9 (0.75)	301 (202)	1320 (300)	396 (90)	386 (15.2)	193 (7.6)
			OFNP	18.5 (0.73)	316 (212)	660 (150)	198 (45)	386 (15.2)	193 (7.6)
	96	8 (12)	OFNR	22.8 (0.90)	433 (291)	1320 (300)	396 (90)	462 (18.2)	231 (9.1)
			OFNP	22.0 (0.86)	466 (313)	660 (150)	198 (45)	448 (17.6)	224 (8.8)
	144	12 (12)	OFNR	24.8 (0.98)	461 (310)	1320 (300)	396 (90)	514 (20.2)	257 (10.1)
			OFNP	24.2 (0.95)	474 (319)	660 (150)	198 (45)	514 (20.2)	257 (10.1)
Distribution, Interlocking Armor	6	1 (6)	OFCP	13.1 (0.52)	117 (79)	1335 (300)	400 (90)	197 (7.8)	131 (5.2)
	12	1 (12)	OFCP	13.3 (0.52)	129 (87)	1335 (300)	400 (90)	199 (7.8)	133 (5.2)
	24	1 (24)	OFCP	14.8 (0.58)	176 (119)	1780 (400)	534 (120)	223 (8.8)	148 (5.8)
	24	2 (12)	OFCP	18.9 (0.74)	240 (161)	1780 (400)	534 (120)	192 (7.6)	128 (5.0)
	48	4 (12)	OFCP	23.4 (0.92)	408 (274)	2640 (600)	800 (180)	351 (13.8)	234 (9.2)
	72	6 (12)	OFCP	24.7 (0.97)	537 (361)	2640 (600)	800 (180)	371 (14.6)	247 (9.7)
Indoor/Outdoor, Single Loose Tube	6	1 (6)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	45 (30)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
	8	1 (8)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	46 (31)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
	12	1 (12)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	46 (31)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
Indoor/Outdoor, Stranded Loose Tube	24	2 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	36	3 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	48	4 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	72	6 (12)	OFNR	11.9 (0.47)	111 (75)	2670 (600)	890 (200)	178 (7.0)	119 (4.7)
			OFNP	11.7 (0.46)	101 (68)	2670 (600)	890 (200)	175 (6.9)	117 (4.6)
	96	8 (12)	OFNR	13.7 (0.54)	147 (99)	2670 (600)	890 (200)	206 (8.1)	137 (5.4)
			OFNP	13.5 (0.53)	175 (118)	2670 (600)	890 (200)	203 (8.0)	135 (5.3)
	144	12 (12)	OFNR	17.8 (0.70)	252 (169)	4448 (1000)	1335 (300)	267 (10.5)	178 (7.0)
			OFNP	17.7 (0.70)	300 (202)	4448 (1000)	1335 (300)	255 (10.1)	170 (6.7)

Optical Fiber Connector Termination Comparison Chart

		MT-RJ Jacks Outlet, Patch Panel	LightCrimp Plus LC, SC, ST	Epoxy/Polish LC, SC, ST
Termination Technology	Epoxy Required	NO	NO	YES
	Polish Required	NO	NO	YES
	Crimp Required	NO	YES	YES
Setup Time	(Each Location)	< 3 Minutes	< 2 Minutes	< 12 Minutes
Installation Time	(Each Fiber)	~ 1 Minute	~ 1 Minute	7 – 25 Minutes
Connector Cost	(Relative)	Higher	Higher	Lower
Installation Labor Cost	(Relative)	Lower	Lower	Higher
Tool Kit Cost	(Relative)	Lower	Lower	Higher
Skill Level	(Relative)	Lower	Lower	Higher
Training Time	(Relative)	Short	Short	High

NOTE: Entries for time and cost are estimates and relative comparisons. Actual results will vary depending on experience level and conditions at time of termination.

Jack, Plug and Insert Compatibility List

Description		Part Number	SL Series MT-RJ and MT-RJ SECURE Outlet Jacks	MT-RJ and MT-RJ SECURE Patch Panel Jacks	LightCrimp Plus			Epoxy/Polish		
					LC	SC	ST	LC	SC	ST
SL Series Modules	2-Port	1116409	X	–	–	–	–	–	–	–
	2-Port	1116406	X	–	–	–	–	–	–	–
	3-Port	1116408	X	–	–	–	–	–	–	–
	Duplex SC, Single-mode	1375306	–	–	–	X	–	–	X	–
	Duplex SC, Multimode	1375123	–	–	–	X	–	–	X	–
	Duplex SC to ST, Multimode	1375241	–	–	–	X	X	–	X	X
SL Series Inserts	ST, Multimode	1339123	–	–	–	–	X	–	X	X
	ST, Single-mode	1479181	–	–	–	–	X	–	–	X
	LC Duplex, Multimode	1435735	–	–	X	–	–	X	–	–
	LC Duplex, Single-mode	1435799	–	–	X	–	–	X	–	–
	MT-RJ SL Series Housing, Single-mode/Multimode	1374416	X*	X	–	–	–	–	–	–
	HIDEAWAY and HIDEOUT SC Duplex, Multimode	5504640	–	–	–	X	–	–	X	–
HIDEAWAY and HIDEOUT	SC Duplex to Dual ST, Multimode	5504663	–	–	–	X	X	–	X	X
HIDEAWAY and HIDEOUT	Dual ST, Multimode	504662	–	–	–	–	X	–	–	X
HIDEAWAY and HIDEOUT	MT-RJ Parallel Dress Clips, 1-Port	1374206	X**	X	–	–	–	–	–	–
HIDEAWAY and HIDEOUT	MT-RJ Parallel Dress Clips, 2-Port	1374205	X**	X	–	–	–	–	–	–
Surface Mount Inserts	1-Port	1116098	X	–	–	–	–	–	–	–
Surface Mount Inserts	2-Port	557775	X	–	–	–	X	–	–	X
Surface Mount Inserts	2-Port	557350	–	–	–	–	–	–	–	–
Universal Office Box Inserts	ST, Multimode	1479495	–	–	–	–	X	–	–	X
ACO Dual-Port Faceplate	Dual - SC Duplex, Multimode	503662	–	–	–	X	–	–	X	–
ACO Dual-Port Faceplate	Quad - ST, Multimode	502604	–	–	–	–	X	–	–	X
ACO Dual-Port Faceplate	Dual - ST, Multimode	502604	–	–	–	–	X	–	–	X
AFWM Flush Faceplates	Dual - SC Duplex, Multimode	557322	–	–	–	X	–	–	X	–
AFWM Flush Faceplates	Quad - ST, Multimode	557474	–	–	–	–	X	–	–	X
Optical Fiber MUO Mod	MT-RJ Jack, Single-mode/Multimode	1375347	X**	X	–	–	–	–	–	–
Optical Fiber MUO Mod	SC Duplex, Multimode	406818	–	–	–	X	–	–	X	–
Optical Fiber MUO Mod	SC Duplex to Dual ST, Multimode	406819	–	–	–	X	X	–	X	X
Optical Fiber MUO Mod	Dual ST, Multimode	406820	–	–	–	–	X	–	–	X

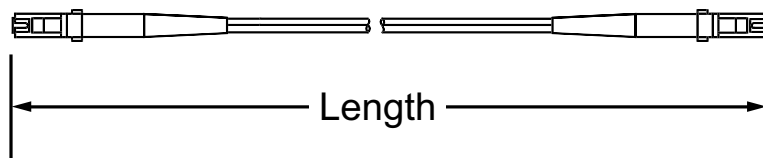
*Note: SL Series MT-RJ Outlet Jacks come with SL Series MT-RJ Housing.

**Note: SL Series Housing is not used when using SL Series MT-RJ Outlet Jacks with MT-RJ Parallel Dress Clips or MT-RJ Jack MUO Modules.

Jack, Plug and Insert Compatibility List

Test Description		FOTP*	Requirement
Visual and Mechanical Inspection:	MT-RJ	13	TIA/EIA-604-12 (FOCIS 12)
Visual and Mechanical Inspection:	SC	13	TIA/EIA-604-3 (FOCIS 3)
Visual and Mechanical Inspection:	ST	13	TIA/EIA-604-2 (FOCIS 2)
Visual and Mechanical Inspection:	LC	13	TIA/EIA-604-10 (FOCIS10)
Attenuation		34	< 0.75 dB
Return Loss		107	< -20 dB
Low Temperature (0° C for 4 days)		188	< 0.3 dB change
Temperature Life (55° C for 14 days)		7	< 0.3 dB change
Humidity (90 to 95% @ 40° C for 4 days)		5	< 0.3 dB change
Impact (8 drops from 1.8 m)		2	< 0.75 dB IL, < -20 dB RL
Durability (500 cycles)		21	< 0.75 dB IL, < -20 dB RL
Cable Retention (0° and 90°)		6	< 0.75 dB IL, < -20 dB RL
Flex (100 cycles)		1	< 0.75 dB IL, < -20 dB RL
Twist (10 cycles)		36	< 0.75 dB IL, < -20 dB RL

Optical Fiber Cable Assembly Length Reference



Meter to Foot and Inch Reference

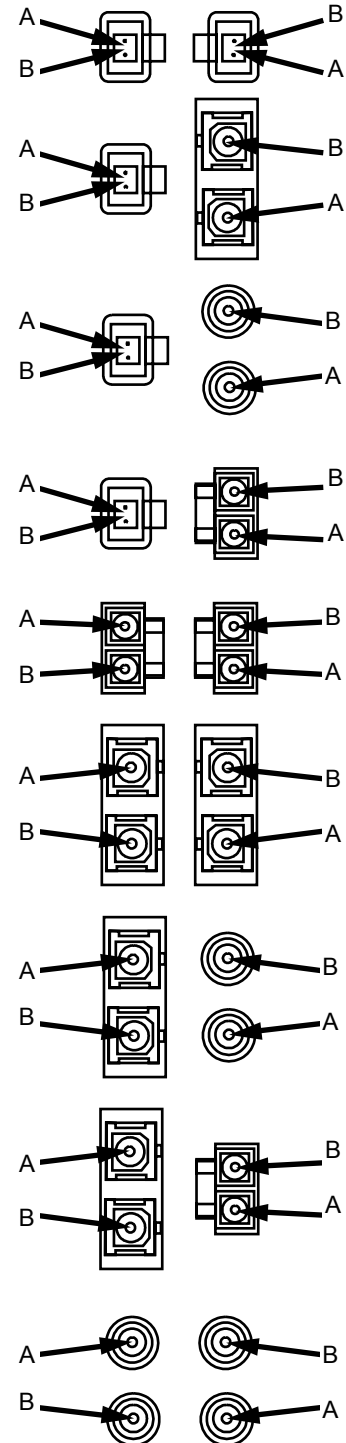
Length in Meters	Length in Feet	Length in Inches
1	3.28	39.37
2	6.56	78.74
3	9.84	118.11
4	13.12	157.48
5	16.40	196.85
6	19.68	236.21
7	22.96	275.59
8	26.25	314.96
9	29.52	354.33
10	32.80	393.70
20	65.62	787.40
30	98.42	1181.10
40	131.23	1574.80
50	164.04	1968.50
60	196.85	2362.20
70	229.66	2755.90
80	262.47	3149.60
90	295.27	3543.30
100	328.08	3937.00
110	360.89	4330.69
120	393.70	4724.39
130	426.51	5118.09
140	459.32	5511.79
150	492.12	5905.49
160	524.93	6299.19
170	557.74	6692.89
180	590.55	7086.59
190	623.36	7480.29
200	656.17	7873.99

Note: Conversion chart is for reference only and does not imply actual assembly length.

Fiber Polarity

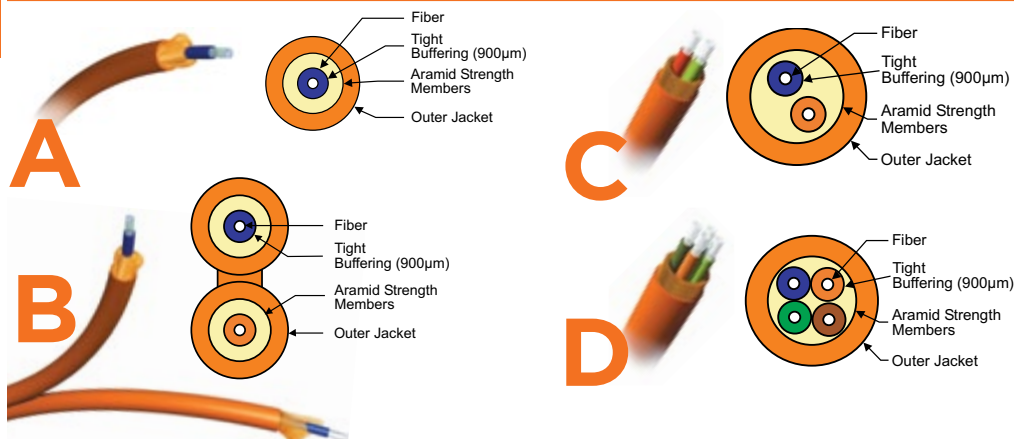
Fiber Color	End 1 Connector	End 2 Connector
White	A	B
Blue	B	A

08



50/125 μ m OM2 Multimode Optical Fiber Interconnect Cable

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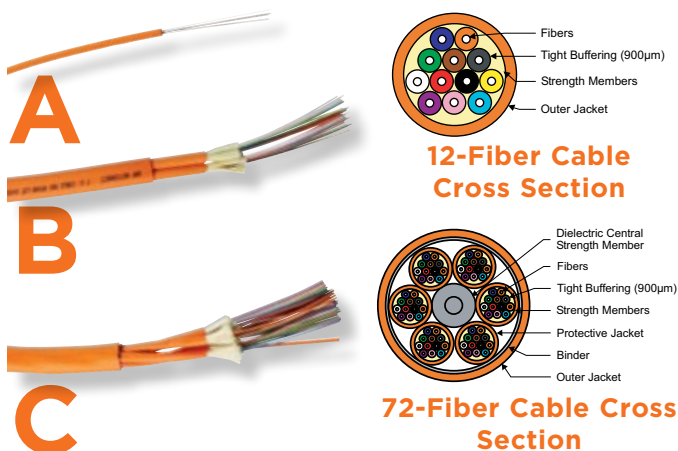


- Suitable for direct termination with epoxy/polish, LightCrimp, LightCrimp PLUS, and MT-RJ jacks for use in pigtails, and patch cords
- Simplex and zipcord cables are additionally suitable for use in internal equipment connections
- Aramid yarn reinforcement
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Outer Jacket Color: Orange
- Hybrid cables and other jacket colors are available
- See Customer Specification 114-92001 at www.ampnetconnect.com for additional information



Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Figure	Riser (OFNR)	Plenum (OFNP)
Simplex (2.0mm)	1	1 (1)		1-1553406-2	1-1553407-2
Simplex (2.9mm)	1	1 (1)	A	1-1553408-2	1-1553409-2
Zipcord (2.0mm)	2	2 (1)		1-1553410-2	1-1553411-2
Zipcord (2.9mm)	2	2 (1)	B	1-1553412-2	1-1553413-2
Dual (2.9 mm)	2	1 (2)	C	1-1553414-2	1-1553415-2
Dual (4.8 mm)	2	1 (2)		1-1553416-2	1-1553417-2
Quad (4.8 mm)	4	1 (4)	D	1-1553418-2	1-1553419-2

50/125 μ m OM2 Multimode Optical Fiber Distribution Cable



- Suitable for horizontal and in-building backbone cabling and for direct termination with epoxy/polish, LightCrimp, LightCrimp PLUS and MT-RJ jacks
- Strippable 900 μ m tight buffer coating allows for easy connectorization
- TIA color-coded fibers for easy identification
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Outer Jacket Color: Orange
- Hybrid cables and other jacket colors are available
- See Customer Specification 114-92000 at www.ampnetconnect.com for additional information



Fiber Count	Unit Count Unit (Fibers/Unit)	Figure	Riser (OFNR)	Plenum (OFNP)
6	1 (6)	A	1-1553307-2	1-1553308-2
8	1 (8)		1-1553309-2	1-1553310-2
12	1 (12)		1-1553311-2	1-1553312-2
	1 (24)		1-1553313-2	1-1553314-2
24	2 (12)	B	1-1553315-2	1-1553316-2
	4 (6)		1-1553317-2	1-1553318-2
36	6 (6)		1-1553319-2	1-1553320-2
48	4 (12)	C	1-1553321-2	1-1553322-2
72	6 (12)		1-1553323-2	1-1553324-2
96	8 (12)		1-1553325-2	1-1553326-2
144	12 (12)		1-1553327-2	1-1553328-2

OM2 (50/125 μm) Multimode



50/125 μm OM2 Multimode Interlocking Armor Optical Fiber Distribution Cable

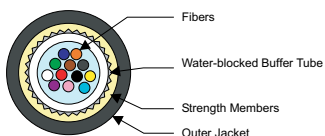


- Robust construction provides extra protection for optical fibers
- Interlocking armor enhances flexibility
- Lightweight aluminum armor simplifies handling
- Installer-friendly plenum rated
- over-jacketing makes cable pulls easier
- Over-jacketing color: Orange
- Hybrid cables and other jacket colors are available
- Pending local codes, may eliminate the need for innerduct
- OFCP (Plenum) rated
- TIA Color Coded fibers
- Strippable 900 μm tight buffer coating allows for easy connectorization
- Indoor/Outdoor and specialty versions available

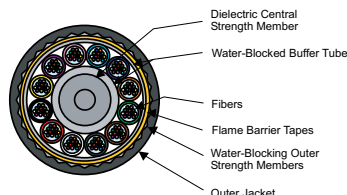
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Fiber Count	Unit Count Units (Fibers/Unit)	Figure	UL/NEC Ratings	Part Number
6	1 (6)	A	Plenum (OFCP)	2-1777121-7
12	1 (12)		Plenum (OFCP)	2-1777117-7
24	1 (24)		Plenum (OFCP)	1-1553420-2
	2 (12)		Plenum (OFCP)	2-1777122-7
48	4 (12)		Plenum (OFCP)	2-1777123-7
72	6 (12)		Plenum (OFCP)	2-1777124-7

50/125 μm OM2 Multimode Optical Fiber Indoor/Outdoor Cable



12-Fiber Cable Cross Section



144-Fiber Cable Cross Section

- Suitable for in-building and inter-building backbone cabling
- Can eliminate the need for a transition point and splicing when entering buildings - go directly from outdoors into building riser or plenum spaces
- Water-blocked buffer tube for water penetration protection
- Flame-retardant UV-protected jacket for harsh outdoor environments
- All-dielectric construction
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Water-blocked buffer tube for water penetration protection
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - Outer Jacket Color is Black for all Fiber Types
 - Hybrid cables and other jacket colors are available
 - Reverse oscillating lay construction for easy midspan access
 - Dry water blocking technology
 - TIA color-coded fibers in TIA color-coded tubes for easy identification
- See Customer Specification 114-92002 at: www.ampnetconnect.com for additional information



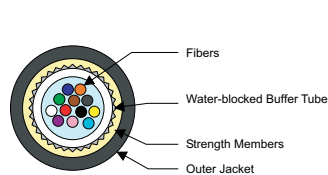
Cable Type	Fiber Count	Unit Count Unit (Fibers/Unit)	Figure	Riser (OFNR)	Plenum (OFNP)
Single Loose Tube	6	1 (6)	A	6-1553342-2	6-1553343-2
	8	1 (8)		6-1553344-2	6-1553345-2
	12	1 (12)		6-1553346-2	6-1553347-2
Stranded Loose Tube	24	2 (12)	C	6-1553348-2	6-1553349-2
	36	3 (12)		6-1553350-2	6-1553351-2
	48	4 (12)		6-1553352-2	6-1553353-2
	72	6 (12)		6-1553354-2	6-1553355-2
	96	8 (12)		6-1553356-2	6-1553357-2
	144	12 (12)		6-1553358-2	6-1553359-2

50/125 μ m OM2 Multimode Optical Fiber Outside Plant (OSP) Cable

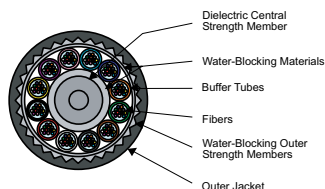
08



A



12-Fiber Cable Cross Section

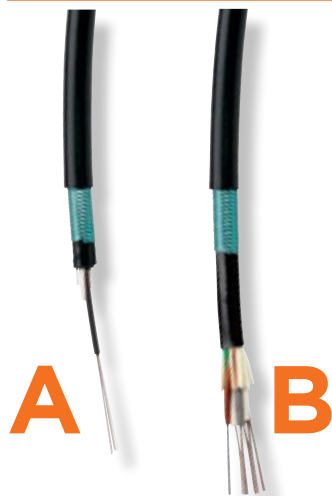


144-Fiber Cable Cross Section

- Suitable for inter-building backbone cabling (aerial, duct or direct burial)
- Dry water-blocking technology
- UV-protected jacket for harsh outdoor environment
- Low friction jacket for ease of pulling through ducts
- All-dielectric construction
- Outer Jacket Color is Black for all Fiber Types
- See Customer Specification 114-92003 at: www.ampnetconnect.com for additional information
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - Reverse oscillating lay construction for easy midspan access
 - TIA color-coded fibers and buffer tubes for easy identification

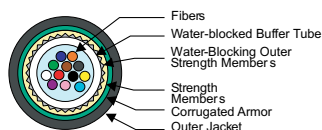
Fiber Count	Unit Count Units (Fibers/Unit)	Figure	Part Number
4	1 (4)		6-1553386-2
6	1 (6)		6-1553387-2
8	1 (8)		6-1553388-2
12	1 (12)		6-1553389-2
24	2 (12)		6-1553390-2
36	3 (12)		6-1553391-2
48	4 (12)		6-1553392-2
72	6 (12)		6-1553393-2
96	8 (12)		6-1553394-2
144	12 (12)	A	6-1553395-2

50/125 μ m OM2 Multimode Optical Fiber Outside Plant Armored (OSPA) Cable

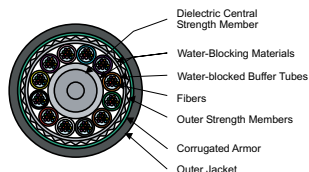


A

B



12-Fiber Cable Cross Section



144-Fiber Cable Cross Section

- Suitable for inter-building backbone cabling (aerial, duct or direct buried)
- Dry water-blocking technology
- UV-protected jacket for harsh outdoor environment
- Low friction jacket for ease of pulling through ducts
- Corrugated steel tape armor for rugged environments and rodent protection
- Outer Jacket Color is Black
- See Customer Specification 114-92003 at: www.ampnetconnect.com for additional information
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - TIA color-coded fibers and buffer tubes for easy identification
 - Reverse oscillating lay construction for easy midspan access
 - Hybrid cables (with single-mode and multimode fibers) are available to provide a built-in migration path for future applications that will require single-mode fibers

Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Figure	Part Number
Single Loose Tube	4	1 (4)		6-1553396-2
	6	1 (6)	A	6-1553397-2
	8	1 (8)		6-1553398-2
	12	1 (12)		6-1553399-2
Stranded Loose Tube	24	2 (12)		6-1553400-2
	36	3 (12)		6-1553401-2
	48	4 (12)	B	6-1553402-2
	72	6 (12)		6-1553403-2
	96	8 (12)		6-1553404-2
	144	12 (12)		6-1553405-2

OM2 (50/125 μm) Multimode



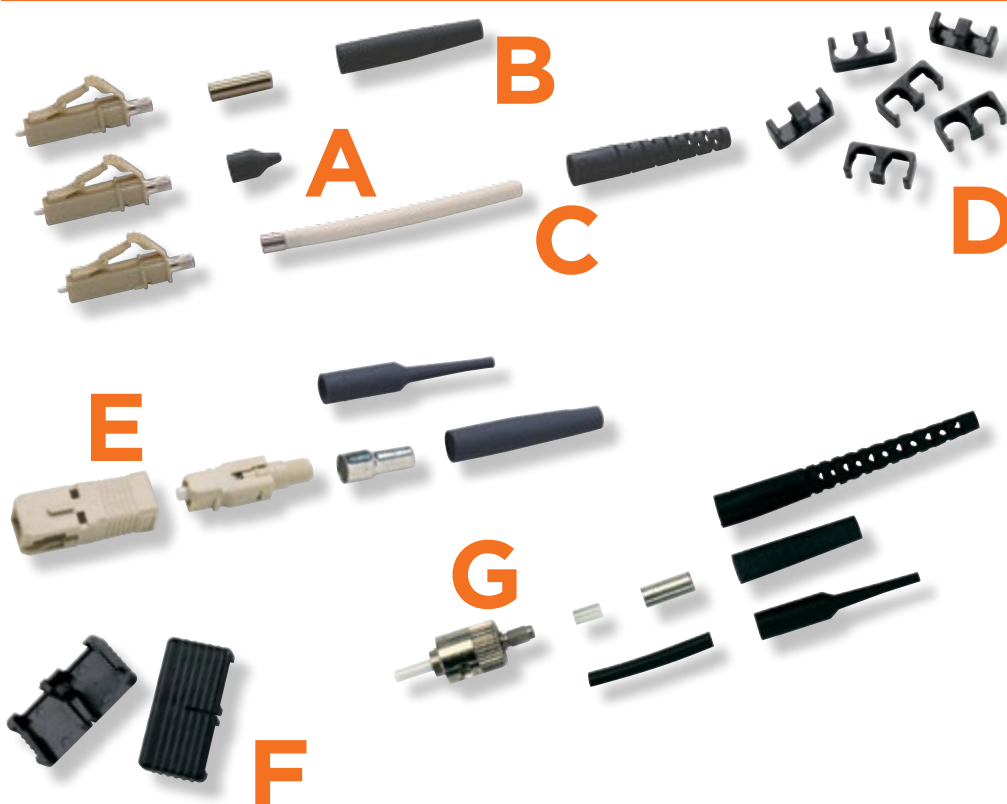
50/125 μm OM2 Multimode LightCrimp PLUS Connectors (No-epoxy/No-polish)

08



- Easy installation:
- No epoxy, no polishing
- No bench tool required
- Strip, cleave, and crimp
- Match fiber type of cable to fiber type of LightCrimp Plus connector
- Mates with standard couplers, adapters, and adapter plates
- LC small form factor design is half the size of SC
- Select appropriate part number for termination to:
 - 900 μm tight-buffered fiber or 250 μm coated fiber
 - 1.6 – 2.0 mm jacketed fiber
 - 3 mm jacketed fiber
- LC connector clip turns simplex connectors into duplex connectors and allows for polarity correction after termination
- Termination tool kits in Chapter 22

Connector Type	Housing Color	Boot Color	Used With	Figure	Part Number
LC Simplex	Beige	Black	900 μm buffered and 250 μm coated fibers	A	6754483-2
			1.6 to 2.0 mm Jacketed Cable		1918627-2
SC Simplex	Beige	Black	900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable	B	6278079-2
ST	Metallic	Black	900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable	C	6278082-1
Duplex LC Clip, package of 6	Black	–	Simplex LC Connectors	D	1754371-2
½ Duplex SC Clip (two are required to make a complete clip)	Black	–	Simplex SC Connectors	E	6348522-1



- Each connector kit comes with accessories needed to terminate to 250 μ m fiber, 900 μ m tight-buffered fiber, 900 μ m easy-strip, buffer tube splitter kits, 2 mm or 3 mm cable (select appropriate part number)
- Suitable for use with heat-cured or anaerobic (quick cure) adhesive
- See Instruction Sheet for recommended anaerobic adhesive
- Mates with standard couplers, adapters, and adapter plates
- LC small form factor design is half the size of SC
- Pre-radiused ceramic ferrules for easy polishing
- Duplex SC can be assembled using two Simplex SC connectors and one duplex clip
- Boot type and coupling nut options (select appropriate part number)

Description	Housing Color	Boot Color	Used With	Figure	Part Number
LC Simplex	Beige	Black	900 μ m buffered and 250 μ m coated fibers	A	1918385-4
			1.6 to 2 mm Jacketed Cable	B	1918267-4
			3.0 mm Jacketed Cable	C	1918375-4
Duplex LC Clip, package of 6	Black	—	Simplex LC Connectors	D	1754371-2
SC Simplex	Beige	Black	900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	E	1-5503948-3
			3 mm Jacketed Cable		1-5503948-2
			900 μ m buffered and 250 μ m coated fibers	E	5504932-1
			2 mm Jacketed Cable		5504931-6
1/2 Duplex SC Clip (two are required to make a complete clip)	Black	—	Simplex SC Connectors	F	6348522-1
ST	Black	Black	900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable		5503571-3
			900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	G	5492458-1
	Metalic	Black	3 mm Jacketed Cable		1-5501380-6
			900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	G	5501380-1

OM2 (50/125 μm) Multimode



50/125 μm OM2 Multimode MT-RJ Jacks (No-epoxy/No-polish)

08



MT-RJ Patch Panel Jacks

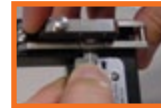
MT-RJ Outlet Jack



SL Series Housing (Almond)



Strip



Cleave



Lock

- Patch panel jacks terminate either two 900 μm tight-buffered fibers or two 250 μm coated fibers (select appropriate part number)
- Outlet jacks terminate two 900 μm tight-buffered fibers
- Match fiber type of cable to fiber type of MT-RJ Jack
- No epoxy, no polishing, no crimping
- Two fibers in one ferrule
- Jacks can be reterminated improving yield
- Tunable
- No bench tool required
- Small form factor design is half the size of SC duplex
- Jack design eliminates need for MT-RJ Coupler
- Each Outlet Jack part number includes:
 - One MT-RJ jack
 - One actuation tool
 - One bend-limiting boot
 - One SL Series Housing - allows use in any faceplate or outlet that accepts SL Series Jacks
- Each patch panel jack part number includes:
 - Six patch panel jacks
 - Two actuation tools
 - One Fiber guide
 - One Icon wheel
- SL Series housing and bend limiting boot are also available separately

Description	Jack Color	SL Series Housing Color	For Use With	
			900 μm Tight-buffered Fibers	250 μm Coated Fibers
MT-RJ Patch Panel Jack	Black	—	6588880-1	6278303-1
MT-RJ Outlet Jack	Black	Almond	6278414-1	—
		Black	6278414-2	—
		White	6278414-3	—
		Gray	6278414-4	—
		Orange	6278414-5	—
		Blue	6278414-6	—
		Red	6278414-7	—
		Yellow	6278414-8	—
		Green	6278414-9	—
		Violet	1-6278414-0	—
		Electrical Ivory	1-6278414-1	—

50/125 μ m OM2 Multimode MT-RJ Jack Accessories

08

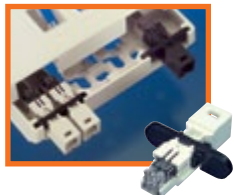
A



B



- Parallel Dress Clips:
 - 1-Port clip holds one MT-RJ Jack (sold separately)
 - 2-Port clip holds two MT-RJ Jacks (sold separately)
 - Allow use of MT-RJ Jacks in faceplates and outlets that hold flanged optical fiber adapters



C

- Bend Limiting Boots:
 - Compatible with all MT-RJ Jacks
 - Comes in a package of six
 - Protects fiber transition at back of MT-RJ Jack

D



- SL Series housing easily snap into SL Series Modules, mounting straps, patch panels, and faceplates
- SL Series housing accepts one MT-RJ Jack sold separately
- MT-RJ Outlet Jacks not included with any accessory listed here

Description		Package Quantity	Figure	SL Series Housing Color	Part Number
Parallel Dress Clip	1-Port (Accepts 1 MT-RJ Jack)	6	A	—	1374206-1
	2-Port (Accepts 2 MT-RJ Jacks)	3	B	—	1374205-1
Bend Limiting Boot	Black	6	C	—	6374208-4
			D	Almond	1374416-1
				Black	1374416-2
				White	1374416-3
				Gray	1374416-4
				Orange	1374416-5
				Blue	1374416-6
				Red	1374416-7
				Yellow	1374416-8
				Green	1374416-9
				Violet	1-1374416-0
				Electrical Ivory	1-1374416-1
				Rose	2-1374416-3
SL Series Housing	1-Port (Accepts 1 MT-RJ Jack)	1		Aqua	2-1374416-4
				Brown	2-1374416-5
				Slate	2-1374416-6

LightCrimp Splice

A



B



- Terminates 250 μ m coated, 900 μ m tight-buffered, and 2.0 mm jacketed fibers
- Use with multimode and single-mode 125 μ m diameter fibers
- No epoxy, set-up, or workstation required
- Use Termination Tool Kit part number 1553212-1, See Chapter 22
- Splice Performance Characteristics:
 - Attenuation: Typical 0.1 dB
 - Return Loss: (at ambient: 18 to 28° C) >20 dB Multimode >35 dB Single-mode
 - Operating Temperature: -25 to 70° C
- Tensile Retention:
 - 250 μ m coated: 2.0 N
 - 900 μ m buffered: 3.0 N
 - Jacketed: 50 N



Insert First Fiber and Complete Buffer Crimp



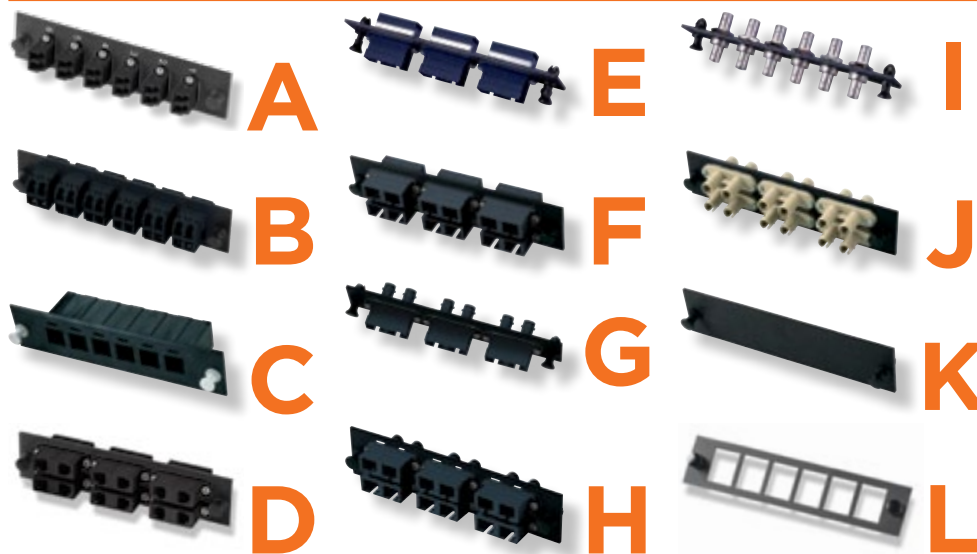
Insert Second Fiber and Actuate Crimp



Complete Second Buffer Crimp and Remove Splice from Tool

Description	Figure	Part Number
LightCrimp Splice for 250 μ m Coated and 900 μ m tight-buffered Fibers	A	1985374-1
LightCrimp Splice for 2.0 mm Jacketed Fiber	B	1985805-1

50/125 μm OM2 Multimode Snap-in Adapter Plates

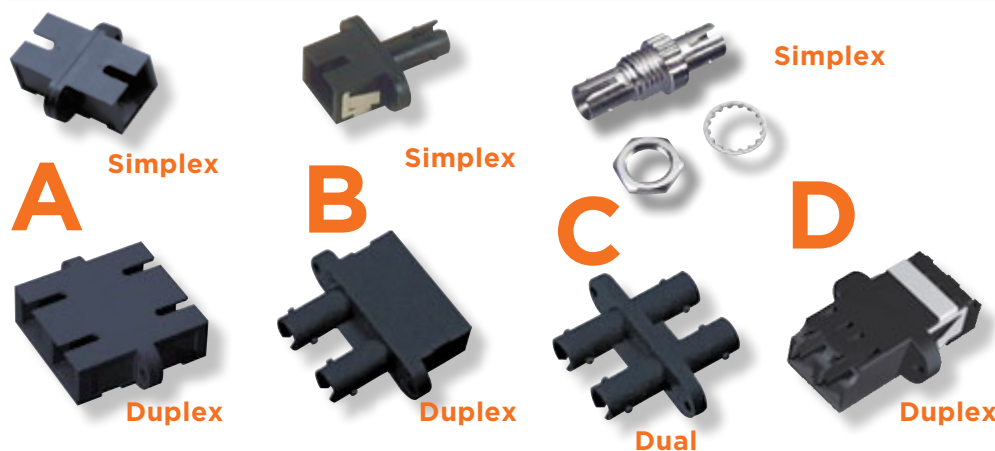


- All Snap-in Adapter Plates fit AMP NETCONNECT unloaded Optical Fiber Enclosures, see Chapter 15
- MT-RJ Jack Adapter Plates:
 - Hold up to six (6) MT-RJ (standard or secure) Jacks or Pigtail Jack Cable Assemblies
 - Accepts labeling icons
- MT-RJ Plug Adapter Plates hold up to twelve (12) MT-RJ Plugs (standard only)
- Package quantity = 1 per pack
- SL Series multimedia adapter plates accept SL Series jacks and inserts

08

Coupling Adapter	Fibers	Duplex Ports	Coupler Count	Adapter Color	Figure	Part Number
LC Duplex	12	6	6	Black	A	1374463-4
	24	12	12	Black	B	1435516-4
MT-RJ, Holds 6 Jacks	12	6	—	—	C	1278328-3
MT-RJ, 12 Plugs	24	12	—	Black	D	1435440-2
SC Simplex	6	3	3	Black		559517-3
	6	3	3	Black	E	559558-5
SC Duplex	12	6	6	Black	F	559596-5
	6	3	3	Black	G	559601-4
SC Duplex to Dual ST	12	6	6	Black	H	1278368-2
	6	3	6	Metallic	I	559557-1
ST	12	6	6	Beige	J	1278567-1
MPO	—	—	6	Black		1374598-1
Blank	—	—	—	—	K	559523-1
SL Series Multimedia Adapter Plate	—	—	—	—	L	1479506-1

50/125 μm OM2 Multimode Couplers & Adapters



- MT-RJ Couplers mate multimode or single-mode MT-RJ Plugs
- Duplex coupler mates four MT-RJ Plugs (4-fibers total, 2-fibers/mated pair)
- Simplex coupler mates two MT-RJ Plugs (2-fibers total, 2-fibers/mated pair)
- Mounting screws are available for couplers with mounting tabs (flanged)
- FOCIS - compliant designs

Description	Color	Figure	Simplex	Duplex
MT-RJ Coupler	Almond		1278017-1	6374906-1
SC Coupler	Black	A	5502632-7	5502776-7
SC to ST Coupling Adapter	Black	B	5502780-1	5503137-1
ST Coupler	Metallic/Beige	C	501381-1	504662-2
LC Coupler	Black	D	—	1-6457567-7

50/125 μ m OM2 Multimode LC Cable Assemblies

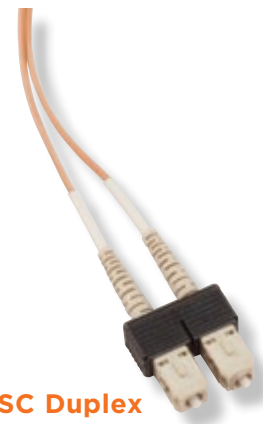
08



LC Duplex



MT-RJ



SC Duplex



Dual ST

- LC, SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Each MT-RJ Connector houses two fibers
- Other lengths available, see customer drawings for details
- Orange cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
LC Duplex	LC Duplex	1906866-1	1906866-2	1906866-3	1906866-5	1-1906866-0
	MT-RJ	6374647-1	6374647-2	6374647-3	6374647-5	1-6374647-0
	SC Duplex	1907380-1	1907380-2	1907380-3	1907380-5	1-1907380-0
	ST (Dual)	1906822-1	1906822-2	1906822-3	1906822-5	1-1906822-0

50/125 μ m OM2 Multimode MT-RJ Cable Assemblies



MT-RJ



SC Duplex

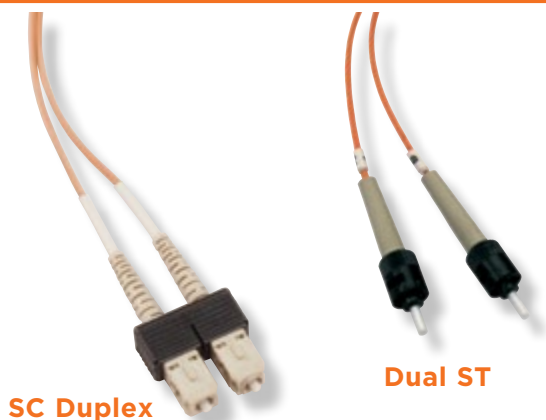


Dual ST

- SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Each MT-RJ Connector houses two fibers
- Other lengths available, see customer drawings for details
- Orange cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
MT-RJ	MT-RJ	6278128-1	6278128-2	6278128-3	6278128-5	1-6278128-0
	SC Simplex	6278127-1	6278127-2	6278127-3	6278127-5	1-6278127-0
	SC Duplex	6278126-1	6278126-2	6278126-3	6278126-5	1-6278126-0
	ST (Dual)	6278199-1	6278199-2	6278199-3	6278199-5	1-6278199-0

50/125 μm OM2 Multimode SC Cable Assemblies



- SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Other lengths available, see customer drawings for details
- Orange cable jacketing

08

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
SC Duplex	SC Duplex	1907379-1	1907379-2	1907379-3	1907379-5	1-1907379-0
	ST (Dual)	5492591-1	5492591-2	5492591-3	5492591-5	1-5492591-0

50/125 μm OM2 Multimode ST Cable Assemblies



- Connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Other lengths available, see customer drawings for details
- Orange cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
ST (Dual)	ST (Dual)	5492591-1	5492591-2	5492591-3	5492591-5	1-5492591-0

50/125 μm OM2 Multimode Pigtail (Single-Ended) Cable Assemblies

- Splice-able pigtail assemblies
- 250 μm coated fiber in protective 900 μm tubing
- Compatible with fusion or mechanical splices
- Each MT-RJ Connector houses two fibers
- MT-RJ Plugs are pinned

Connector End	Cable Type	Length		
		1 m	2 m	3 m
LC Simplex	2.0 mm Jacketed With One 250 μm coated fiber in protective 900 μm tubing	6754404-1	—	—
MT-RJ Jack, Black Housing	Dual 250 μm coated fibers in 900 μm tubing	6374018-1	6374018-2	6374018-3
MT-RJ Plug, Black	Dual 250 μm coated fibers in 900 μm tubing	6588849-1	6588849-2	6588849-3

50/125 µm OM2 Multimode LC Test Kits

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- Test Kits includes:
 - Cable Assemblies
 - LC Duplex Clips
 - Mandrels
 - Carrying case
- Test Kits for LC SECURE Connector Systems also available
- See "FIELD TESTING LC OPTICAL FIBER SYSTEMS" White Paper (available on-line at www.ampnetconnect.com) for test details

Description

Part Number

For use with Dual Fiber Testers with SC Transmit and LC Recieve Ports

1828867-1

For use with Dual Fiber Testers with ST Transmit and LC Recieve Ports

1828867-2

For use with Dual Fiber Testers with LC Transmit and LC Recieve Ports

1828867-3

50/125 µm OM2 Multimode Replacement Components for LC Test Kits

- Assemblies are 3m in length
- Assemblies are Simplex style
- Cable Assemblies are riser (OFNR) rated

Description

Part Number

Mandrels (Transmit side only)

1435119-1

LC Duplex Clips (pack of 6)

1754371-2

SC to LC Simplex Assembly, 3m

1907490-3

ST to LC Simplex Assembly, 3m

1907493-3

LC to LC Simplex Assembly, 3m

1907496-3

50/125 µm OM2 Multimode MT-RJ OTDR Test Assemblies

- For use in testing with an OTDR test set
- All assemblies are 100m in length

Description

Connector End 1

Connector End 2

Part Number

Launch Lead

MT-RJ

Dual SC Simplex

6588080-1

Dual ST

6588078-1

50/125 µm OM2 Multimode MT-RJ Loopbacks

Description

Part Number

MT-RJ Loopback

6278357-1

50/125 µm OM2 Multimode MT-RJ Test Kits



- Each test kit includes:
 - 1 - MT-RJ Adapter
 - 2 - MT-RJ (no pins) to SC simplex or ST cable assemblies
 - 1 - MT-RJ (with pins) to SC simplex or ST cable assembly
 - 1 - MT-RJ to MT-RJ cable assembly
 - 2 - Mandrels
 - 1 - Carrying case
- Test Kits for MT-RJ SECURE Connector Systems also available
- See "MT-RJ OPTICAL FIBER SYSTEMS TESTING" White Paper (available on-line at www.ampnetconnect.com) for details

Equipment Transmit Port

Part Number

SC

1278861-1

ST

1278861-2

Replacement Components for 50/125 µm OM2 Multimode MT-RJ Test Kits

- All assemblies are 4 m in length
- Pinned MT-RJ Cable Assemblies are used for testing only
- Cable Assemblies are riser-rated

Description

Connector End 1

Connector End 2

Part Number

Replacement Cable Assemblies

Unpinned MT-RJ

Unpinned MT-RJ

6435096-2

Unpinned MT-RJ

SC

6435092-2

Unpinned MT-RJ

ST-style

6435094-2

Pinned MT-RJ

SC

6435092-5

Pinned MT-RJ

ST-style

6435094-5

Replacement Coupler

MT-RJ Plug

MT-RJ Plug

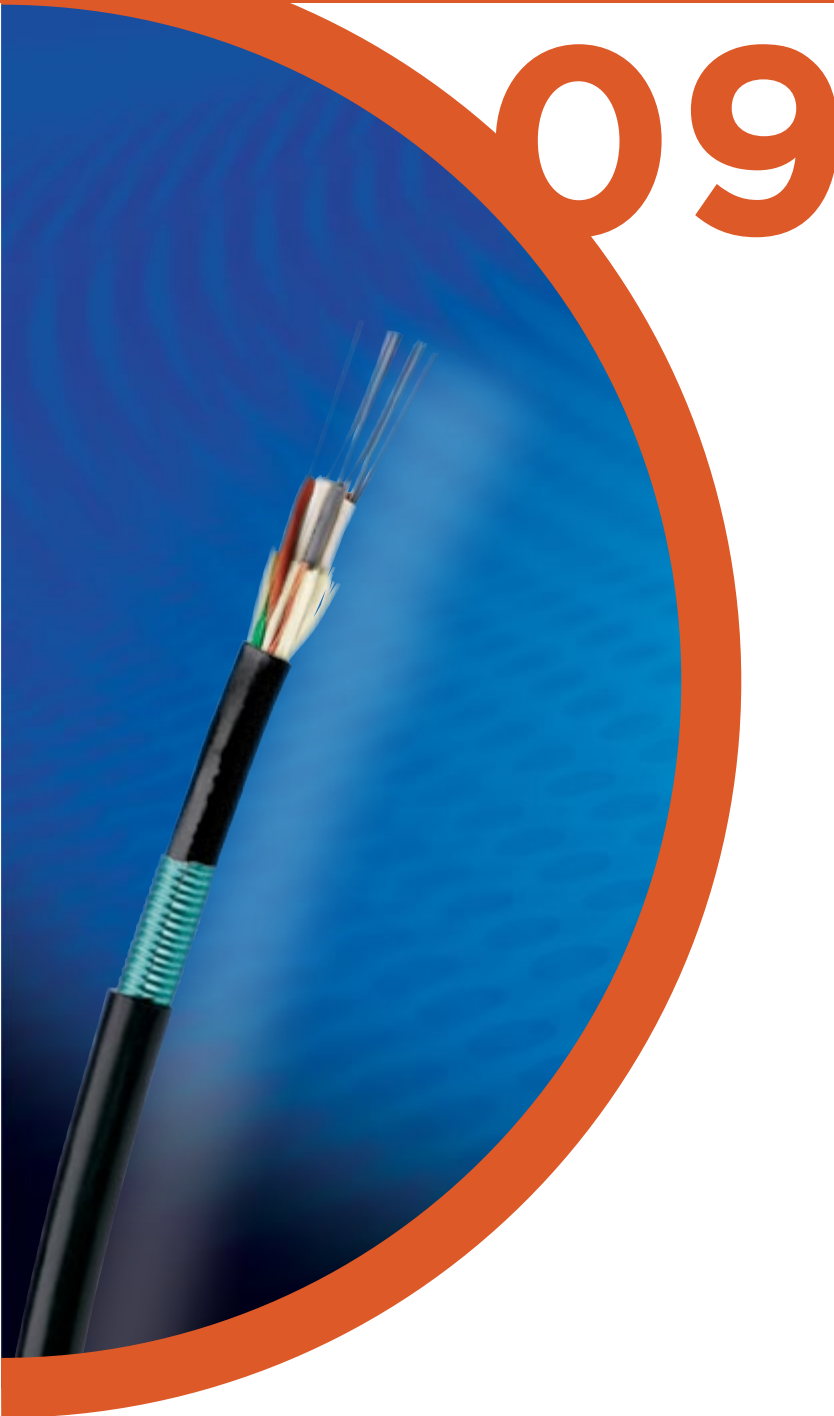
1278017-1

Replacement Mandrel

Set of two, for 50/125 µm Fibers

–

1435119-2



62.5/125 μm OM1 Optical Fiber General Product Information	02 – 05
Optical Fiber Interconnect Cable	06
Optical Fiber Distribution Cable	06
Interlocking Armor Optical Fiber Distribution Cable	07
Optical Fiber Indoor/Outdoor Cable	07
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62.5/125 µm OM1 Optical Fiber Cable Information

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AMP NETCONNECT fiber optic cables contain fibers for use in optical fiber applications, including: local area networks (LANs), wide area networks (WANs), fiber to the curb (FTTC), fiber to the home (FTTH), fiber to the desk (FTTD), and others.

AMP NETCONNECT Optical Fiber Cables are tested and designed to the most recent applicable industry standards for premise cabling, network and telecommunications applications, including:

IEEE 802.3	Ethernet	Fast Ethernet	Gigabit Ethernet
10 Gigabit Ethernet	FDDI	ATM	Fibre Channel
Token Ring	ANSI/TIA-568	ISO 11801	ICEA-596
ICEA-640	ICEA-696	IEC 793-1	IEC 794-1
Telecordia GR-409-CORE	Telecordia GR-20-CORE		

62.5/125 µm OM1 Optical Fiber Performance

Gigabit Ethernet @ 850 nm	Gigabit Ethernet @ 1300 nm	10 Gigabit Ethernet @ 850 nm	10 Gigabit Ethernet @ 1300 nm
300 m	550 m	33 m	300 m

62.5/125 µm OM1 (850/1300 nm) Optical Fiber Cable Performance Specifications

Cable Type	Maximum Attenuation dB/km		OFL Bandwidth MHz·km		Laser Bandwidth MHz·km	
	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
Indoor Cables	3.5	1.2	200	500	—	—
Indoor/Outdoor and OSP Loose Tube Cables	3.5	1.2	200	500	—	—

Optical Fiber Cable Temperature Ranges

Cable Type	Condition	Riser	Plenum
		Storage	Storage
Interconnect (Tight Buffered) Cables	Storage	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)
	Operating	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
	Installation	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
Indoor, Distribution (Tight Buffered) Cables	Storage	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)
	Operating	-20°C to +70°C (-4°F to +158°F)	0°C to +70°C (32°F to +158°F)
	Installation	-10°C to +60°C (14°F to +140°F)	0°C to +60°C (32°F to +140°F)
Indoor/Outdoor Cables	Storage	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)
	Operating	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)
	Installation	-20°C to +60°C (-4°F to +140°F)	-0°C to +60°C (-32°F to +140°F)
Stranded Cables			
OSP (Loose Tube) Cables	Storage	-40°C to +70°C (-40°F to +158°F)	—
	Operating	-40°C to +70°C (-40°F to +158°F)	—
	Installation	-30°C to +60°C (-22°F to +140°F)	—

Optical Fiber Cable Technical Information

Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Diameter mm (in)	Weight kg/km (lb/kft)	Tensile Load N (lbf)		Bending Radius mm (in)	
					Installation	Long Term	Installation	Long Term
Outside Plant, Single Loose Tube	4	1 (4)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	6	1 (6)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	8	1 (8)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	12	1 (12)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	24	2 (12)	11.0 (0.43)	100 (67)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
Outside Plant, Stranded Loose Tube	36	3 (12)	11.0 (0.43)	93 (62)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	48	4 (12)	11.0 (0.43)	97 (65)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	72	6 (12)	11.9 (0.47)	130 (87)	2670 (600)	890 (200)	252 (9.9)	126 (5.0)
	96	8 (12)	13.6 (0.53)	158 (106)	2670 (600)	890 (200)	287 (11.3)	144 (5.6)
	144	12 (12)	17.6 (0.69)	252 (169)	2670 (600)	890 (200)	364 (14.3)	182 (7.2)
Outside Plant, Armored Single Loose Tube	4	1 (4)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	6	1 (6)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	8	1 (8)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	12	1 (12)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	24	2 (12)	13.8 (0.55)	214 (144)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
Outside Plant, Armored Stranded Loose Tube	36	3 (12)	13.8 (0.55)	218 (146)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	48	4 (12)	13.8 (0.55)	223 (150)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	72	6 (12)	14.8 (0.58)	265 (178)	2670 (600)	890 (200)	335 (13.2)	167 (6.6)
	96	8 (12)	16.7 (0.69)	307 (206)	2670 (600)	890 (200)	378 (14.9)	189 (7.4)
	144	12 (12)	21.4 (0.84)	498 (335)	2670 (600)	890 (200)	455 (17.9)	228 (9)

OM1 (62.5/125 μm) Multimode



Optical Fiber Cable Technical Information (Continued)

Cable Type	Fiber Count	Unit Count Units (Fibers/ Unit)	UL/NEC Ratings	Diameter mm (in)	Weight kg/km (lb/ kft)	Tensile Load N (lbf)		Bending Radius mm (in)	
						Installation	Long Term	Installation	Long Term
Interconnect, Simplex	1	1 (1)	OFNR	2.0 (0.08)	5 (3)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNP	2.0 (0.08)	6 (4)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNR	2.9 (0.11)	8 (5)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
			OFNP	2.9 (0.11)	9 (6)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
Interconnect, Zipcord	2	2 (1)	OFNR	2.0 (0.08) x 4.1 (0.16)	8 (5)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNP	2.0 (0.08) x 4.1 (0.16)	10 (7)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNR	2.9 (0.11) x 5.9 (0.23)	15 (10)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
			OFNP	2.9 (0.11) x 5.9 (0.23)	15 (10)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
Interconnect, Dual	2	1 (2)	OFNR	2.9 (0.11)	7 (5)	100 (22)	30 (7)	57 (2.2)	29 (1.1)
			OFNP	2.9 (0.11)	9 (6)	100 (22)	30 (7)	57 (2.2)	29 (1.1)
			OFNR	4.8 (0.3)	20 (13)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
			OFNP	4.8 (0.3)	30 (20)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
Interconnect, Quad	4	1 (4)	OFNR	4.8 (0.3)	25 (17)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
			OFNP	4.8 (0.3)	30 (20)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
Distribution	6	1 (6)	OFNR	5.2 (0.20)	29 (19)	660 (150)	198 (45)	114 (4.5)	57 (2.2)
			OFNP	4.8 (0.19)	24 (16)	440 (100)	132 (30)	110 (4.3)	55 (2.2)
	8	1 (8)	OFNR	5.7 (0.22)	24 (16)	660 (150)	198 (45)	136 (5.4)	68 (2.7)
			OFNP	5.0 (0.20)	26 (17)	440 (100)	132 (30)	110 (4.3)	55 (2.2)
	12	1 (12)	OFNR	6.0 (0.24)	37 (25)	660 (150)	198 (45)	128 (5)	64 (2.5)
			OFNP	5.7 (0.23)	46 (31)	440 (100)	132 (30)	128 (5)	64 (2.5)
	24	1 (24)	OFNR	8.0 (0.31)	61 (41)	1320 (300)	396 (90)	178 (7)	89 (3.5)
			OFNP	7.7 (0.30)	69 (46)	660 (150)	198 (45)	168 (6.6)	84 (3.3)
	24	2 (12)	OFNR	7.4 x 13.0 (0.29 x 0.51)	87 (58)	1320 (300)	396 (90)	284 (11.2)	142 (5.6)
			OFNP	7.0 x 12.4 (0.28 x 0.49)	92 (62)	660 (150)	198 (45)	264 (10.4)	132 (5.2)
	24	4 (6)	OFNR	13.4 (0.53)	180 (121)	1320 (300)	396 (90)	275 (10.8)	137 (5.4)
			OFNP	13.3 (0.52)	200 (134)	660 (150)	198 (45)	266 (10.5)	133 (5.2)
	36	6 (6)	OFNR	16.4 (0.65)	220 (148)	1320 (300)	396 (90)	342 (13.5)	171 (6.7)
			OFNP	16.0 (0.63)	255 (171)	660 (150)	198 (45)	327 (12.9)	164 (6.4)
	48	4 (12)	OFNR	16.0 (0.63)	250 (168)	1320 (300)	396 (90)	350 (13.8)	175 (6.9)
			OFNP	15.2 (0.60)	202 (136)	660 (150)	198 (45)	312 (12.3)	156 (6.1)
	72	6 (12)	OFNR	18.9 (0.75)	301 (202)	1320 (300)	396 (90)	386 (15.2)	193 (7.6)
			OFNP	18.5 (0.73)	316 (212)	660 (150)	198 (45)	386 (15.2)	193 (7.6)
	96	8 (12)	OFNR	22.8 (0.90)	433 (291)	1320 (300)	396 (90)	462 (18.2)	231 (9.1)
			OFNP	22.0 (0.86)	466 (313)	660 (150)	198 (45)	448 (17.6)	224 (8.8)
	144	12 (12)	OFNR	24.8 (0.98)	461 (310)	1320 (300)	396 (90)	514 (20.2)	257 (10.1)
			OFNP	24.2 (0.95)	474 (319)	660 (150)	198 (45)	514 (20.2)	257 (10.1)
Distribution, Interlocking Armor	6	1 (6)	OFCP	13.1 (0.52)	117 (79)	1335 (300)	400 (90)	197 (7.8)	131 (5.2)
	12	1 (12)	OFCP	13.3 (0.52)	129 (87)	1335 (300)	400 (90)	199 (7.8)	133 (5.2)
	24	1 (24)	OFCP	14.8 (0.58)	176 (119)	1780 (400)	534 (120)	223 (8.8)	148 (5.8)
	24	2 (12)	OFCP	18.9 (0.74)	240 (161)	1780 (400)	534 (120)	192 (7.6)	128 (5.0)
	48	4 (12)	OFCP	23.4 (0.92)	408 (274)	2640 (600)	800 (180)	351 (13.8)	234 (9.2)
	72	6 (12)	OFCP	24.7 (0.97)	537 (361)	2640 (600)	800 (180)	371 (14.6)	247 (9.7)
Indoor/Outdoor, Single Loose Tube	6	1 (6)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	45 (30)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
	8	1 (8)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	46 (31)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
	12	1 (12)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	46 (31)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
Indoor/Outdoor, Stranded Loose Tube	24	2 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	36	3 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	48	4 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	72	6 (12)	OFNR	11.9 (0.47)	111 (75)	2670 (600)	890 (200)	178 (7.0)	119 (4.7)
			OFNP	11.7 (0.46)	101 (68)	2670 (600)	890 (200)	175 (6.9)	117 (4.6)
	96	8 (12)	OFNR	13.7 (0.54)	147 (99)	2670 (600)	890 (200)	206 (8.1)	137 (5.4)
			OFNP	13.5 (0.53)	175 (118)	2670 (600)	890 (200)	203 (8.0)	135 (5.3)
	144	12 (12)	OFNR	17.8 (0.70)	252 (169)	4448 (1000)	1335 (300)	267 (10.5)	178 (7.0)
			OFNP	17.7 (0.70)	300 (202)	4448 (1000)	1335 (300)	255 (10.1)	170 (6.7)

Optical Fiber Connector Termination Comparison Chart

		MT-RJ Jacks Outlet, Patch Panel	LightCrimp Plus LC, SC, ST	Epoxy/Polish LC, SC, ST
Termination Technology	Epoxy Required	NO	NO	YES
	Polish Required	NO	NO	YES
	Crimp Required	NO	YES	YES
Setup Time	(Each Location)	< 3 Minutes	< 2 Minutes	< 12 Minutes
Installation Time	(Each Fiber)	~ 1 Minute	~ 1 Minute	7 – 25 Minutes
Connector Cost	(Relative)	Higher	Higher	Lower
Installation Labor Cost	(Relative)	Lower	Lower	Higher
Tool Kit Cost	(Relative)	Lower	Lower	Higher
Skill Level	(Relative)	Lower	Lower	Higher
Training Time	(Relative)	Short	Short	High

NOTE: Entries for time and cost are estimates and relative comparisons. Actual results will vary depending on experience level and conditions at time of termination.

Jack, Plug and Insert Compatibility List

Description		Part Number	SL Series MT-RJ and MT-RJ SECURE Outlet Jacks	MT-RJ and MT-RJ SECURE Patch Panel Jacks	LightCrimp Plus			Epoxy/Polish		
					LC	SC	ST	LC	SC	ST
SL Series Modules	2-Port	1116409	X	–	–	–	–	–	–	–
	2-Port	1116406	X	–	–	–	–	–	–	–
	3-Port	1116408	X	–	–	–	–	–	–	–
	Duplex SC, Single-mode	1375306	–	–	–	X	–	–	X	–
	Duplex SC, Multimode	1375123	–	–	–	X	–	–	X	–
	Duplex SC to ST, Multimode	1375241	–	–	–	X	X	–	X	X
SL Series Inserts	ST, Multimode	1339123	–	–	–	–	X	–	X	X
	ST, Single-mode	1479181	–	–	–	–	X	–	–	X
	LC Duplex, Multimode	1435735	–	–	X	–	–	X	–	–
	LC Duplex, Single-mode	1435799	–	–	X	–	–	X	–	–
	MT-RJ SL Series Housing, Single-mode/Multimode	1374416	X*	X	–	–	–	–	–	–
	HIDEAWAY and HIDEOUT SC Duplex, Multimode	5504640	–	–	–	X	–	–	X	–
HIDEAWAY and HIDEOUT	SC Duplex to Dual ST, Multimode	5504663	–	–	–	X	X	–	X	X
HIDEAWAY and HIDEOUT	Dual ST, Multimode	504662	–	–	–	–	X	–	–	X
HIDEAWAY and HIDEOUT	MT-RJ Parallel Dress Clips, 1-Port	1374206	X**	X	–	–	–	–	–	–
HIDEAWAY and HIDEOUT	MT-RJ Parallel Dress Clips, 2-Port	1374205	X**	X	–	–	–	–	–	–
Surface Mount Inserts	1-Port	1116098	X	–	–	–	–	–	–	–
Surface Mount Inserts	2-Port	557775	X	–	–	–	X	–	–	X
Surface Mount Inserts	2-Port	557350	–	–	–	–	–	–	–	–
Universal Office Box Inserts	ST, Multimode	1479495	–	–	–	–	X	–	–	X
ACO Dual-Port Faceplate	Dual - SC Duplex, Multimode	503662	–	–	–	X	–	–	X	–
ACO Dual-Port Faceplate	Quad - ST, Multimode	502604	–	–	–	–	X	–	–	X
ACO Dual-Port Faceplate	Dual - ST, Multimode	502604	–	–	–	–	X	–	–	X
AFWM Flush Faceplates	Dual - SC Duplex, Multimode	557322	–	–	–	X	–	–	X	–
AFWM Flush Faceplates	Quad - ST, Multimode	557474	–	–	–	–	X	–	–	X
Optical Fiber MUO Mod	MT-RJ Jack, Single-mode/Multimode	1375347	X**	X	–	–	–	–	–	–
Optical Fiber MUO Mod	SC Duplex, Multimode	406818	–	–	–	X	–	–	X	–
Optical Fiber MUO Mod	SC Duplex to Dual ST, Multimode	406819	–	–	–	X	X	–	X	X
Optical Fiber MUO Mod	Dual ST, Multimode	406820	–	–	–	–	X	–	–	X

*Note: SL Series MT-RJ Outlet Jacks come with SL Series MT-RJ Housing.

**Note: SL Series Housing is not used when using SL Series MT-RJ Outlet Jacks with MT-RJ Parallel Dress Clips or MT-RJ Jack MUO Modules.

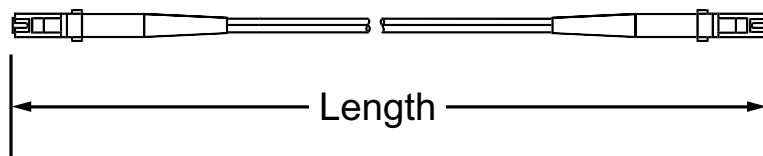
OM1 (62.5/125 μm) Multimode



Jack, Plug and Insert Compatibility List

Test Description	FOTP*	Requirement
Visual and Mechanical Inspection:	MT-RJ 13	TIA/EIA-604-12 (FOCIS 12)
Visual and Mechanical Inspection:	SC 13	TIA/EIA-604-3 (FOCIS 3)
Visual and Mechanical Inspection:	ST 13	TIA/EIA-604-2 (FOCIS 2)
Visual and Mechanical Inspection:	LC 13	TIA/EIA-604-10 (FOCIS10)
Attenuation	34	< 0.75 dB
Return Loss	107	< -20 dB
Low Temperature (0° C for 4 days)	188	< 0.3 dB change
Temperature Life (55° C for 14 days)	7	< 0.3 dB change
Humidity (90 to 95% @ 40° C for 4 days)	5	< 0.3 dB change
Impact (8 drops from 1.8 m)	2	< 0.75 dB IL, < -20 dB RL
Durability (500 cycles)	21	< 0.75 dB IL, < -20 dB RL
Cable Retention (0° and 90°)	6	< 0.75 dB IL, < -20 dB RL
Flex (100 cycles)	1	< 0.75 dB IL, < -20 dB RL
Twist (10 cycles)	36	< 0.75 dB IL, < -20 dB RL

Optical Fiber Cable Assembly Length Reference



Meter to Foot and Inch Reference

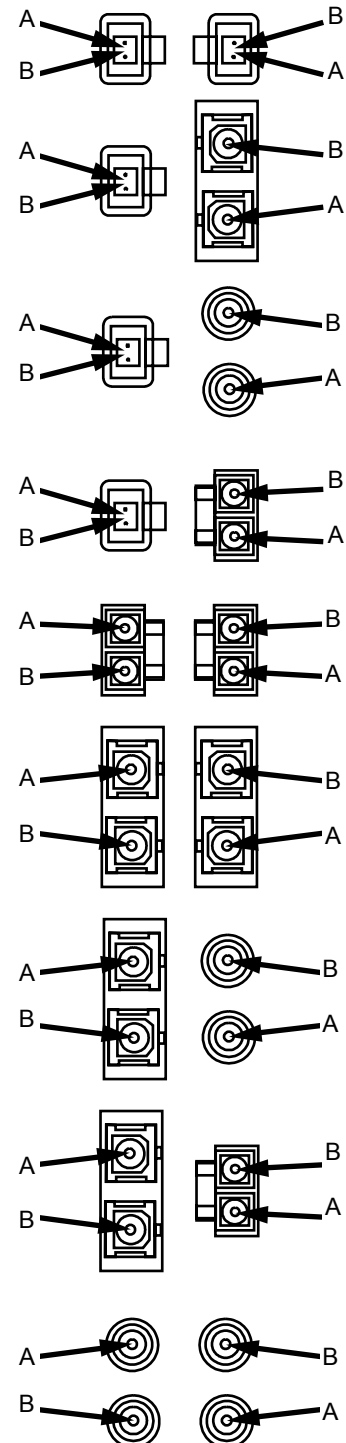
Length in Meters	Length in Feet	Length in Inches
1	3.28	39.37
2	6.56	78.74
3	9.84	118.11
4	13.12	157.48
5	16.40	196.85
6	19.68	236.21
7	22.96	275.59
8	26.25	314.96
9	29.52	354.33
10	32.80	393.70
20	65.62	787.40
30	98.42	1181.10
40	131.23	1574.80
50	164.04	1968.50
60	196.85	2362.20
70	229.66	2755.90
80	262.47	3149.60
90	295.27	3543.30
100	328.08	3937.00
110	360.89	4330.69
120	393.70	4724.39
130	426.51	5118.09
140	459.32	5511.79
150	492.12	5905.49
160	524.93	6299.19
170	557.74	6692.89
180	590.55	7086.59
190	623.36	7480.29
200	656.17	7873.99

Note: Conversion chart is for reference only and does not imply actual assembly length.

Fiber Polarity

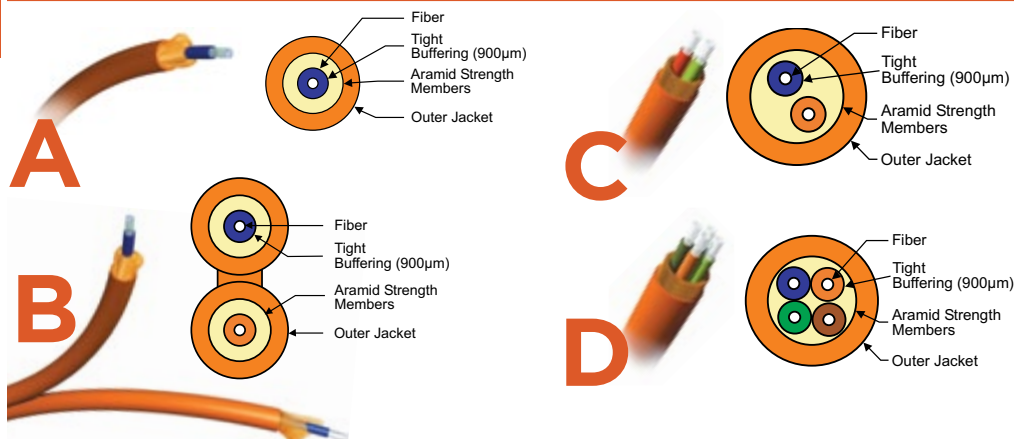
Fiber Color	End 1 Connector	End 2 Connector
White	A	B
Blue	B	A

09



62.5/125 μm OM1 Multimode Optical Fiber Interconnect Cable

09

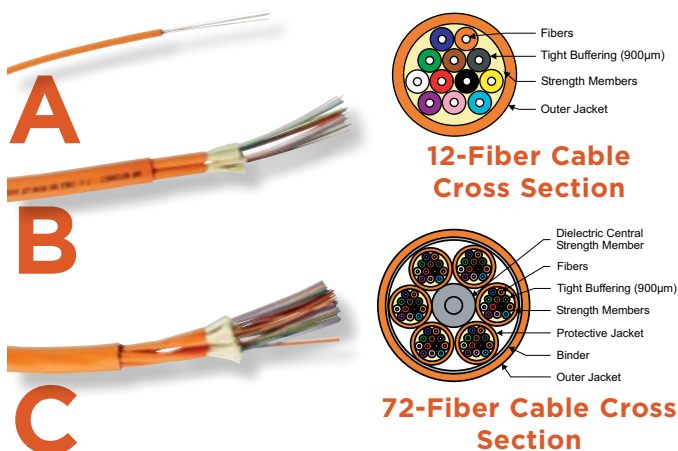


- Suitable for direct termination with epoxy/polish, LightCrimp, LightCrimp PLUS, and MT-RJ jacks for use in pigtails, and patch cords
- Simplex and zipcord cables are additionally suitable for use in internal equipment connections
- Aramid yarn reinforcement
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Outer Jacket Color: Orange
- Hybrid cables and other jacket colors are available
- See Customer Specification 114-92001 at www.ampnetconnect.com for additional information



Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Figure	Riser (OFNR)	Plenum (OFNP)
Simplex (2.0mm)	1	1 (1)		1-1553406-1	1-1553407-1
Simplex (2.9mm)	1	1 (1)	A	1-1553408-1	1-1553409-1
Zipcord (2.0mm)	2	2 (1)		1-1553410-1	1-1553411-1
Zipcord (2.9mm)	2	2 (1)	B	1-1553412-1	1-1553413-1
Dual (2.9 mm)	2	1 (2)	C	1-1553414-1	1-1553415-1
Dual (4.8 mm)	2	1 (2)		1-1553416-1	1-1553417-1
Quad (4.8 mm)	4	1 (4)	D	1-1553418-1	1-1553419-1

62.5/125 μm OM1 Multimode Optical Fiber Distribution Cable



- Suitable for horizontal and in-building backbone cabling and for direct termination with epoxy/polish, LightCrimp, LightCrimp PLUS and MT-RJ jacks
- Strippable 900 μm tight buffer coating allows for easy connectorization
- TIA color-coded fibers for easy identification
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Outer Jacket Color: Orange
- Hybrid cables and other jacket colors are available
- See Customer Specification 114-92000 at www.ampnetconnect.com for additional information



Fiber Count	Unit Count Unit (Fibers/Unit)	Figure	Riser (OFNR)	Plenum (OFNP)
6	1 (6)	A	1-1553307-1	1-1553308-1
8	1 (8)		1-1553309-1	1-1553310-1
12	1 (12)		1-1553311-1	1-1553312-1
	1 (24)		1-1553313-1	1-1553314-1
24	2 (12)	B	1-1553315-1	1-1553316-1
	4 (6)		1-1553317-1	1-1553318-1
36	6 (6)		1-1553319-1	1-1553320-1
48	4 (12)	C	1-1553321-1	1-1553322-1
72	6 (12)		1-1553323-1	1-1553324-1
96	8 (12)		1-1553325-1	1-1553326-1
144	12 (12)		1-1553327-1	1-1553328-1

OM1 (62.5/125 μm) Multimode



62.5/125 μm OM1 Multimode Interlocking Armor Optical Fiber Distribution Cable

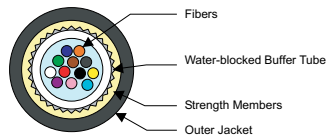


- Robust construction provides extra protection for optical fibers
- Interlocking armor enhances flexibility
- Lightweight aluminum armor simplifies handling
- Installer-friendly plenum rated
- over-jacketing makes cable pulls easier
- Over-jacketing color: Orange
- Hybrid cables and other jacket colors are available
- Pending local codes, may eliminate the need for innerduct
- OFCP (Plenum) rated
- TIA Color Coded fibers
- Strippable 900 μm tight buffer coating allows for easy connectorization
- Indoor/Outdoor and specialty versions available

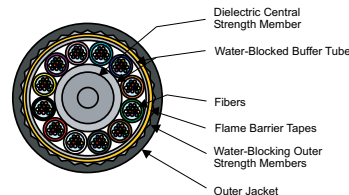
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Fiber Count	Unit Count Units (Fibers/Unit)	Figure	UL/NEC Ratings	Part Number
6	1 (6)	A	Plenum (OFCP)	1-1777121-7
12	1 (12)		Plenum (OFCP)	1-1777117-7
24	1 (24)		Plenum (OFCP)	1-1553420-1
	2 (12)		Plenum (OFCP)	1-1777122-7
48	4 (12)		Plenum (OFCP)	1-1777123-7
72	6 (12)		Plenum (OFCP)	1-1777124-7

62.5/125 μm OM1 Multimode Optical Fiber Indoor/Outdoor Cable



12-Fiber Cable Cross Section



144-Fiber Cable Cross Section

- Suitable for in-building and inter-building backbone cabling
- Can eliminate the need for a transition point and splicing when entering buildings - go directly from outdoors into building riser or plenum spaces
- Water-blocked buffer tube for water penetration protection
- Flame-retardant UV-protected jacket for harsh outdoor environments
- All-dielectric construction
- UL and cUL listed OFNR (Riser) and OFNP (Plenum)
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Water-blocked buffer tube for water penetration protection
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - Outer Jacket Color is Black for all Fiber Types
 - Hybrid cables and other jacket colors are available
 - Reverse oscillating lay construction for easy midspan access
 - Dry water blocking technology
 - TIA color-coded fibers in TIA color-coded tubes for easy identification
- See Customer Specification 114-92002 at: www.ampnetconnect.com for additional information



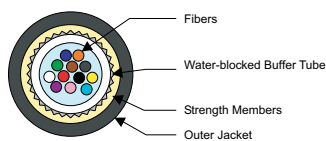
Cable Type	Fiber Count	Unit Count Unit (Fibers/Unit)	Figure	Riser (OFNR)	Plenum (OFNP)
Single Loose Tube	6	1 (6)	A	6-1553342-1	6-1553343-1
	8	1 (8)		6-1553344-1	6-1553345-1
	12	1 (12)		6-1553346-1	6-1553347-1
Stranded Loose Tube	24	2 (12)	C	6-1553348-1	6-1553349-1
	36	3 (12)		6-1553350-1	6-1553351-1
	48	4 (12)		6-1553352-1	6-1553353-1
	72	6 (12)		6-1553354-1	6-1553355-1
	96	8 (12)		6-1553356-1	6-1553357-1
	144	12 (12)		6-1553358-1	6-1553359-1

62.5/125 μm OM1 Multimode Optical Fiber Outside Plant (OSP) Cable

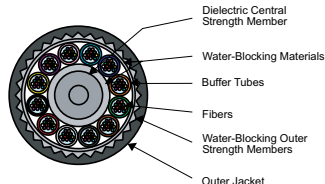
09



A



12-Fiber Cable Cross Section



144-Fiber Cable Cross Section

- Suitable for inter-building backbone cabling (aerial, duct or direct burial)
- Dry water-blocking technology
- UV-protected jacket for harsh outdoor environment
- Low friction jacket for ease of pulling through ducts
- All-dielectric construction
- Outer jacket color: black
- See Customer Specification 114-92003 at: www.ampnetconnect.com for additional information
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - Reverse oscillating lay construction for easy midspan access
 - TIA color-coded fibers and buffer tubes for easy identification

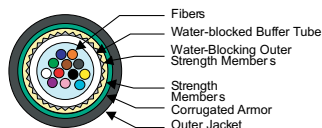
Fiber Count	Unit Count Units (Fibers/Unit)	Figure	Part Number
4	1 (4)		6-1553386-1
6	1 (6)		6-1553387-1
8	1 (8)		6-1553388-1
12	1 (12)		6-1553389-1
24	2 (12)		6-1553390-1
36	3 (12)		6-1553391-1
48	4 (12)		6-1553392-1
72	6 (12)		6-1553393-1
96	8 (12)		6-1553394-1
144	12 (12)	A	6-1553395-1

62.5/125 μm OM1 Multimode Optical Fiber Outside Plant Armored (OSPA) Cable

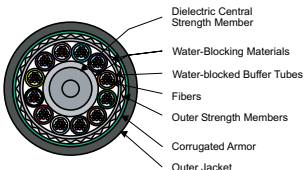


A

B



12-Fiber Cable Cross Section



144-Fiber Cable Cross Section

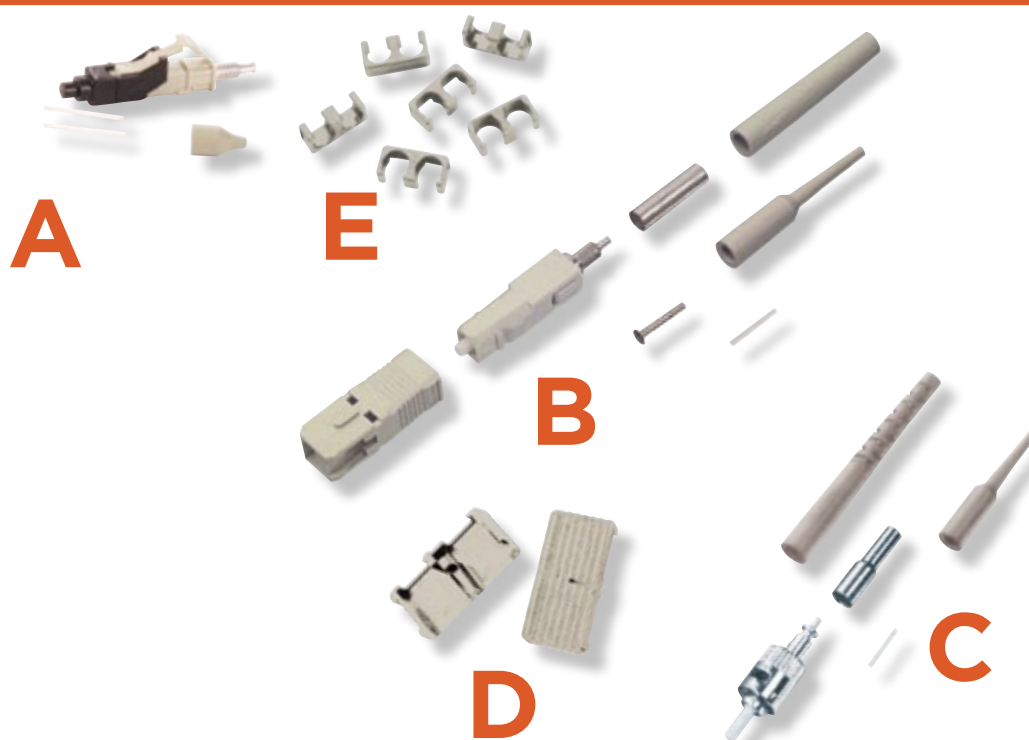
- Suitable for inter-building backbone cabling (aerial, duct or direct buried)
- Dry water-blocking technology
- UV-protected jacket for harsh outdoor environment
- Low friction jacket for ease of pulling through ducts
- Corrugated steel tape armor for rugged environments and rodent protection
- Outer jacket color: black
- See Customer Specification 114-92003 at: www.ampnetconnect.com for additional information
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - TIA color-coded fibers and buffer tubes for easy identification
 - Reverse oscillating lay construction for easy midspan access
 - Hybrid cables (with single-mode and multimode fibers) are available to provide a built-in migration path for future applications that will require single-mode fibers

Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Figure	Part Number
Single Loose Tube	4	1 (4)		6-1553396-1
	6	1 (6)	A	6-1553397-1
	8	1 (8)		6-1553398-1
	12	1 (12)		6-1553399-1
Stranded Loose Tube	24	2 (12)		6-1553400-1
	36	3 (12)		6-1553401-1
	48	4 (12)	B	6-1553402-1
	72	6 (12)		6-1553403-1
	96	8 (12)		6-1553404-1
	144	12 (12)		6-1553405-1

OM1 (62.5/125 μm) Multimode

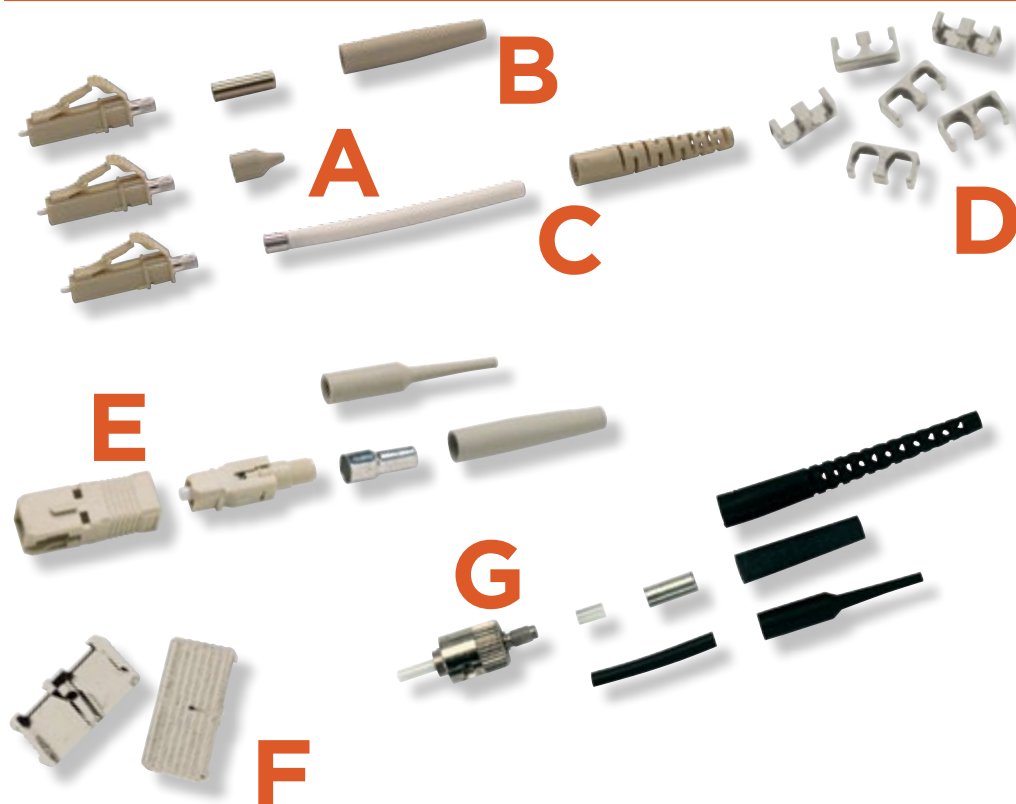
62.5/125 μm OM1 Multimode LightCrimp PLUS Connectors (No-epoxy/No-polish)

09



- Easy installation:
- No epoxy, no polishing
- No bench tool required
- Strip, cleave, and crimp
- Match fiber type of cable to fiber type of LightCrimp Plus connector
- Mates with standard couplers, adapters, and adapter plates
- LC small form factor design is half the size of SC
- Select appropriate part number for termination to:
 - 900 μm tight-buffered fiber or 250 μm coated fiber
 - 1.6 – 2.0 mm jacketed fiber
 - 3 mm jacketed fiber
- LC connector clip turns simplex connectors into duplex connectors and allows for polarity correction after termination.
- Termination tool kits in Chapter 22

Connector Type	Housing Color	Boot Color	Used With	Figure	Part Number
LC Simplex	Beige	Beige	900 μm buffered and 250 μm coated fibers	A	6754483-1
			1.6 to 2.0 mm Jacketed Cable		1918627-1
SC Simplex	Beige	Beige	900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable	B	5492643-1
ST	Metallic	Beige	900 μm buffered fibers, 250 μm coated fibers, and 3 mm Jacketed Cable	C	5492642-2
Duplex LC Clip, package of 6	Beige	–	Simplex LC Connectors	D	1754371-5
1/2 Duplex SC Clip (two are required to make a complete clip)	Beige	–	Simplex SC Connectors	E	6348522-4



- Each connector kit comes with accessories needed to terminate to 250 μ m fiber, 900 μ m tight-buffered fiber, 900 μ m easy-strip, buffer tube splitter kits, 2 mm or 3 mm cable (select appropriate part number)
- Suitable for use with heat-cured or anaerobic (quick cure) adhesive
- See Instruction Sheet for recommended anaerobic adhesive
- Mates with standard couplers, adapters, and adapter plates
- LC small form factor design is half the size of SC
- Pre-radiused ceramic ferrules for easy polishing
- Duplex SC can be assembled using two Simplex SC connectors and one duplex clip
- Boot type and coupling nut options (select appropriate part number)

Description	Housing Color	Boot Color	Used With	Figure	Part Number
LC Simplex	Beige	Beige	900 μ m buffered and 250 μ m coated fibers	A	1918385-1
			1.6 to 2 mm Jacketed Cable	B	1918267-1
			3.0 mm Jacketed Cable	C	1918375-1
Duplex LC Clip, package of 6	Beige	–	Simplex LC Connectors	D	1754371-5
SC Simplex	Beige	Beige	900 μ m buffered fibers and 3 mm Jacketed Cable	E	5503948-5
			3 mm Jacketed Cable		5503948-1
			900 μ m buffered and 250 μ m coated fibers	E	5504932-6
			2 mm Jacketed Cable		5504931-1
½ Duplex SC Clip (two are required to make a complete clip)	Beige	–	Simplex SC Connectors	F	6348522-4
ST	Black	Black	900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable		5503571-3
	Metalic	Black	900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	G	5492458-1
			3 mm Jacketed Cable		1-5501380-6
			900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	G	5501380-1

OM1 (62.5/125 μm) Multimode



62.5/125 μm OM1 Multimode MT-RJ Jacks (No-epoxy/No-polish)

09



MT-RJ Patch Panel Jacks

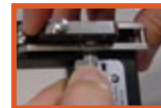
MT-RJ Outlet Jack



SL Series Housing



Strip



Cleave



Lock

- Patch panel jacks terminate either two 900 μm tight-buffered fibers or two 250 μm coated fibers (select appropriate part number)
- Outlet jacks terminate two 900 μm tight-buffered fibers
- Match fiber type of cable to fiber type of MT-RJ Jack
- No epoxy, no polishing, no crimping
- Two fibers in one ferrule
- Jacks can be reterminated improving yield
- Tunable
- No bench tool required
- Small form factor design is half the size of SC duplex
- Jack design eliminates need for MT-RJ Coupler
- Each Outlet Jack part number includes:
 - One MT-RJ jack
 - One actuation tool
 - One bend-limiting boot
 - One SL Series Housing - allows use in any faceplate or outlet that accepts SL Series Jacks
- Each patch panel jack part number includes:
 - Six patch panel jacks
 - Two actuation tools
 - One Fiber guide
 - One Icon wheel
- SL Series housing and bend limiting boot are also available separately

Description	Jack Color	SL Series Housing Color	For Use With	
			900 μm Tight-buffered Fibers	250 μm Coated Fibers
MT-RJ Patch Panel Jack	Beige	—	6588880-2	6278303-2
MT-RJ Outlet Jack	Beige	Almond	6278415-1	—
		Black	6278415-2	—
		White	6278415-3	—
		Gray	6278415-4	—
		Orange	6278415-5	—
		Blue	6278415-6	—
		Red	6278415-7	—
		Yellow	6278415-8	—
		Green	6278415-9	—
		Violet	1-6278415-0	—
		Electrical Ivory	1-6278415-1	—

62.5/125 μm OM1 Multimode MT-RJ Jack Accessories

09

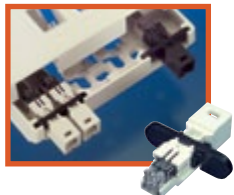
A



B



- Parallel Dress Clips:
 - 1-Port clip holds one MT-RJ Jack (sold separately)
 - 2-Port clip holds two MT-RJ Jacks (sold separately)
 - Allow use of MT-RJ Jacks in faceplates and outlets that hold flanged optical fiber adapters



- Can be used with HIDEAWAY and HIDEOUT outlets (Chapter 06)

- Bend Limiting Boots:
 - Compatible with all MT-RJ Jacks
 - Comes in a package of six
 - Protects fiber transition at back of MT-RJ Jack

- SL Series housing easily snap into SL Series Modules, mounting straps, patch panels, and faceplates
- SL Series housing accepts one MT-RJ Jack sold separately
- MT-RJ Outlet Jacks not included with any accessory listed here

C



D



Description		Package Quantity	Figure	SL Series Housing Color	Part Number
Parallel Dress Clip	1-Port (Accepts 1 MT-RJ Jack)	6	A	—	1374206-1
	2-Port (Accepts 2 MT-RJ Jacks)	3	B	—	1374205-1
Bend Limiting Boot	Beige	6	C	—	6374208-5
			D	Almond	1374416-1
				Black	1374416-2
				White	1374416-3
				Gray	1374416-4
				Orange	1374416-5
				Blue	1374416-6
				Red	1374416-7
				Yellow	1374416-8
				Green	1374416-9
				Violet	1-1374416-0
				Electrical Ivory	1-1374416-1
				Rose	2-1374416-3
				Aqua	2-1374416-4
SL Series Housing	1-Port (Accepts 1 MT-RJ Jack)	1		Brown	2-1374416-5
				Slate	2-1374416-6

LightCrimp Splice

A



B



- Terminates 250 μm coated, 900 μm tight-buffered, and 2.0 mm jacketed fibers
- Use with multimode and single-mode 125 μm diameter fibers
- No epoxy, set-up, or workstation required
- Use Termination Tool Kit part number 1553212-1, See Chapter 22

- Splice Performance Characteristics:
 - Attenuation: Typical 0.1 dB
 - Return Loss: (at ambient: 18 to 28° C) >20 dB Multimode >35 dB Single-mode
 - Operating Temperature: -25 to 70° C
- Tensile Retention:
 - 250 μm coated: 2.0 N
 - 900 μm buffered: 3.0 N
 - Jacketed: 50 N



Insert First Fiber and Complete Buffer Crimp



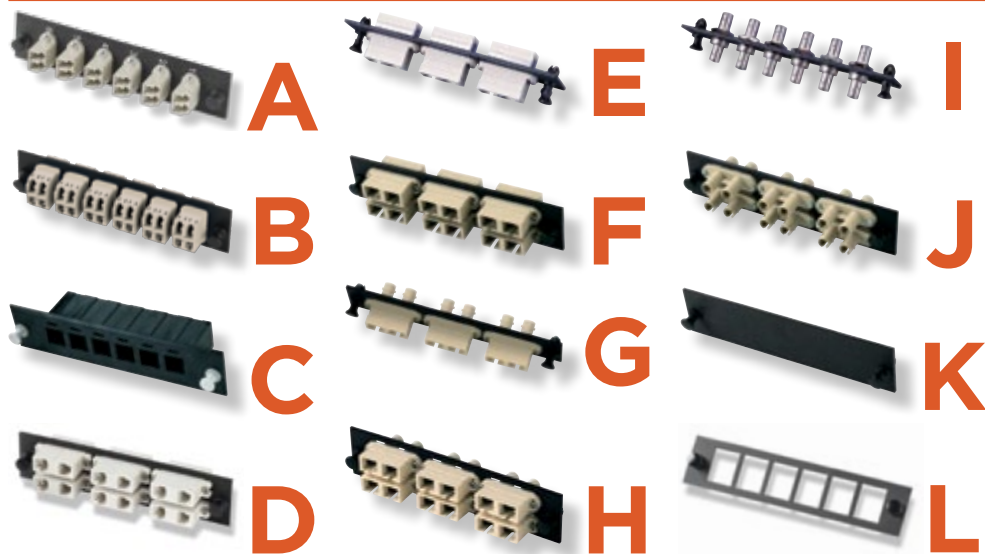
Insert Second Fiber and Actuate Crimp



Complete Second Buffer Crimp and Remove Splice from Tool

Description	Figure	Part Number
LightCrimp Splice for 250 μm Coated and 900 μm tight-buffered Fibers	A	1985374-1
LightCrimp Splice for 2.0 mm Jacketed Fiber	B	1985805-1

62.5/125 μm OM1 Multimode Snap-in Adapter Plates

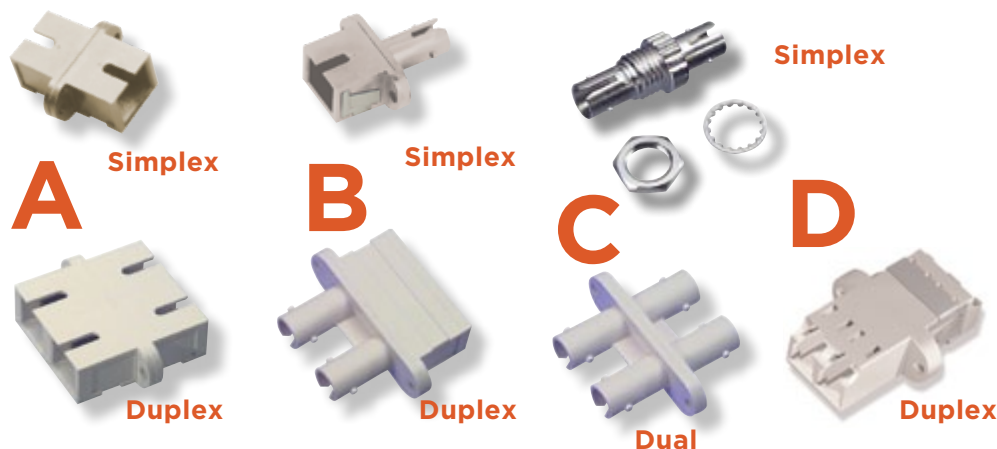


- All Snap-in Adapter Plates fit AMP NETCONNECT unloaded Optical Fiber Enclosures, see Chapter 15
- MT-RJ Jack Adapter Plates:
 - Hold up to six (6) MT-RJ (standard or secure) Jacks or Pigtail Jack Cable Assemblies
 - Accepts labeling icons
- MT-RJ Plug Adapter Plates hold up to twelve (12) MT-RJ Plugs (standard only)
- Package quantity = 1 per pack
- SL Series multimedia adapter plates accept SL Series jacks and inserts

09

Coupling Adapter	Fibers	Duplex Ports	Coupler Count	Adapter Color	Figure	Part Number
LC Duplex	12	6	6	Beige	A	1374463-2
	24	12	12	Beige	B	1435516-2
MT-RJ, Holds 6 Jacks	12	6	—	—	C	1278328-3
MT-RJ, 12 Plugs	24	12	—	Beige	D	1435440-1
SC Simplex	6	3	3	Beige		559517-7
	6	3	3	Beige	E	559558-1
SC Duplex	12	6	6	Beige	F	559596-1
	6	3	3	Beige	G	559601-1
SC Duplex to Dual ST	12	6	6	Beige	H	1278368-1
	6	3	6	Metallic	I	559557-1
ST	12	6	6	Beige	J	1278567-1
MPO	—	—	6	Black		1374598-1
Blank	—	—	—	—	K	559523-1
SL Series Multimedia Adapter Plate	—	—	—	—	L	1479506-1

62.5/125 μm OM1 Multimode Couplers & Adapters



- MT-RJ Couplers mate multimode or single-mode MT-RJ Plugs
- Duplex coupler mates four MT-RJ Plugs (4-fibers total, 2-fibers/mated pair)
- Simplex coupler mates two MT-RJ Plugs (2-fibers total, 2-fibers/mated pair)
- Mounting screws are available for couplers with mounting tabs (flanged)
- FOCIS - compliant designs

Description	Color	Figure	Simplex	Duplex
MT-RJ Coupler	Almond		1278017-1	6374906-1
SC Coupler	Beige	A	5504614-1	5504640-1
SC to ST Coupling Adapter	Beige	B	5502780-3	5504663-4
ST Coupler	Metallic/Beige	C	501381-1	504662-2
LC Coupler	Beige	D	—	6457567-5

62.5/125 μ m OM1 Multimode LC Cable Assemblies

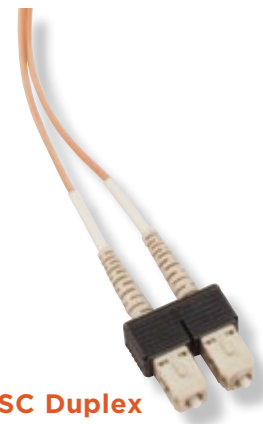
09



LC Duplex



MT-RJ



SC Duplex



Dual ST

- LC, SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Each MT-RJ Connector houses two fibers
- Other lengths available, see customer drawings for details
- Orange cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
LC Duplex	LC Duplex	1906865-1	1906865-2	1906865-3	1906865-5	1-1906865-0
	MT-RJ	6374646-1	6374646-2	6374646-3	6374646-5	1-6374646-0
	SC Duplex	1906777-1	1906777-2	1906777-3	1906777-5	1-1906777-0
	ST (Dual)	1906821-1	1906821-2	1906821-3	1906821-5	1-1906821-0

62.5/125 μ m OM1 Multimode MT-RJ Cable Assemblies



MT-RJ



SC Duplex

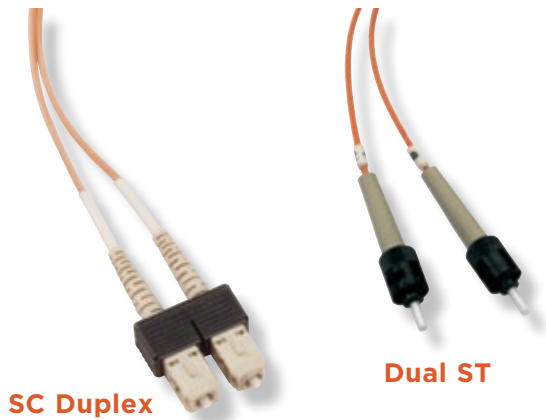


Dual ST

- SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Each MT-RJ Connector houses two fibers
- Other lengths available, see customer drawings for details
- Orange cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
MT-RJ	MT-RJ	6278032-1	6278032-2	6278032-3	6278032-5	1-6278032-0
	SC Simplex	6278030-1	6278030-2	6278030-3	6278030-5	1-6278030-0
	SC Duplex	6278028-1	6278028-2	6278028-3	6278028-5	1-6278028-0
	ST (Dual)	1907441-1	1907441-2	1907441-3	1907441-5	1-1907441-0

62.5/125 μm OM1 Multimode SC Cable Assemblies



- SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Other lengths available, see customer drawings for details
- Orange cable jacketing

09

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
SC Duplex	SC Duplex	1907434-1	1907434-2	1907434-3	1907434-5	1-1907434-0
	ST (Dual)	1907385-1	1907385-2	1907385-3	1907385-5	1-1907385-0

62.5/125 μm OM1 Multimode ST Cable Assemblies



- Connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Other lengths available, see customer drawings for details
- Orange cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
ST (Dual)	ST (Dual)	1907436-1	1907436-2	1907436-3	1907436-5	1-1907436-0

62.5/125 μm OM1 Multimode Pigtail (Single-Ended) Cable Assemblies

- Splice-able pigtail assemblies
- 250 μm coated fiber in protective 900 μm tubing
- Compatible with fusion or mechanical splices
- Each MT-RJ Connector houses two fibers
- MT-RJ Plugs are pinned

Connector End	Cable Type	Length		
		1 m	2 m	3 m
LC Simplex	2.0 mm Jacketed With One 250 μm coated fiber in protective 900 μm tubing	6754400-1	—	—
MT-RJ Jack, Black Housing	Dual 250 μm coated fibers in 900 μm tubing	6374019-1	6374019-2	6374019-3
MT-RJ Plug, Black	Dual 250 μm coated fibers in 900 μm tubing	6693532-1	6693532-2	6693532-3

62.5/125 µm OM1 Multimode LC Test Kits

09

- Test Kits includes:
 - Cable Assemblies
 - LC Duplex Clips
 - Mandrels
 - Carrying case
- Test Kits for LC SECURE Connector Systems also available
- See "FIELD TESTING LC OPTICAL FIBER SYSTEMS" White Paper (available on-line at www.ampnetconnect.com) for test details

Description

Part Number

For use with Dual Fiber Testers with SC Transmit and LC Recieve Ports

1828868-1

For use with Dual Fiber Testers with ST Transmit and LC Recieve Ports

1828868-2

For use with Dual Fiber Testers with LC Transmit and LC Recieve Ports

1828868-3

Replacement Components for 62.5/125 µm OM1 Multimode LC Test Kits

- Assemblies are 3m in length
- Assemblies are Simplex style
- Cable Assemblies are riser (OFNR) rated

Description

Part Number

Mandrels (Transmit side only)

1435118-1

LC Duplex Clips (pack of 6)

1754371-2

SC to LC Simplex Assembly, 3m

1907491-3

ST to LC Simplex Assembly, 3m

1907494-3

LC to LC Simplex Assembly, 3m

1907497-3

62.5/125 µm OM1 Multimode MT-RJ OTDR Test Assemblies

- For use in testing with an OTDR test set
- All assemblies are 100m in length

Description

Connector End 1

Connector End 2

Part Number

Launch Lead

MT-RJ

Dual SC Simplex

6588079-1

Dual ST

6588077-1

62.5/125 µm OM1 Multimode MT-RJ Loopbacks

Description

Part Number

MT-RJ Loopback

6278153-1

62.5/125 µm OM1 Multimode MT-RJ Test Kits



- Each test kit includes:
 - 1 - MT-RJ Adapter
 - 2 - MT-RJ (no pins) to SC simplex or ST cable assemblies
 - 1 - MT-RJ (with pins) to SC simplex or ST cable assembly
 - 1 - MT-RJ to MT-RJ cable assembly
 - 2 - Mandrels
 - 1 - Carrying case
- Test Kits for MT-RJ SECURE Connector Systems also available
- See "MT-RJ OPTICAL FIBER SYSTEMS TESTING" White Paper (available on-line at www.ampnetconnect.com) for details

Equipment Transmit Port

Part Number

SC

1278862-1

ST

1278862-2

Replacement Components for 62.5/125 µm OM1 Multimode MT-RJ Test Kits

- All assemblies are 4 m in length
- Pinned MT-RJ Cable Assemblies are used for testing only
- Cable Assemblies are riser-rated

Description

Connector End 1

Connector End 2

Part Number

Replacement Cable Assemblies

Unpinned MT-RJ

Unpinned MT-RJ

6435096-1

Unpinned MT-RJ

SC

6435092-1

Unpinned MT-RJ

ST-style

6435094-1

Pinned MT-RJ

SC

6435092-4

Pinned MT-RJ

ST-style

6435094-4

Replacement Coupler

MT-RJ Plug

MT-RJ Plug

1278017-1

Replacement Mandrel

Set of two, for 62.5/125 µm Fibers –

1435118-2

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Single-mode Optical Fiber General Information	02 – 05
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Single-mode Optical Fiber Cable Information

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AMP NETCONNECT fiber optic cables contain fibers for use in optical fiber applications, including: local area networks (LANs), wide area networks (WANs), fiber to the curb (FTTC), fiber to the home (FTTH), fiber to the desk (FTTD), and others.

AMP NETCONNECT Optical Fiber Cables are tested and designed to the most recent applicable industry standards for premise cabling, network and telecommunications applications, including:

IEEE 802.3	Ethernet	Fast Ethernet	Gigabit Ethernet
10 Gigabit Ethernet	FDDI	ATM	Fibre Channel
Token Ring	ANSI/TIA-568	ISO 11801	ICEA-596
ICEA-640	ICEA-696	IEC 793-1	IEC 794-1
Telecordia GR-409-CORE	Telecordia GR-20-CORE		

Single-mode Optical Fiber Performance

Gigabit Ethernet @ 850 nm	Gigabit Ethernet @ 1310 nm	10 Gigabit Ethernet @ 850 nm	10 Gigabit Ethernet @ 1310 nm
–	5000 m	–	10000 m

Single-mode (1300/1550 nm) Optical Fiber Cable Performance Specifications

Cable Type	Maximum Attenuation dB/km	
	1310 nm	1550 nm
Indoor Cables	0.5	0.5
Indoor/Outdoor and OSP Loose Tube Cables	0.4	0.3

Optical Fiber Cable Temperature Ranges

Cable Type	Condition	Riser	Plenum
		Storage	Storage
Interconnect (Tight Buffered) Cables	Operating	-40°C to +65°C (-40°F to +149°F)	-40°C to +65°C (-40°F to +149°F)
	Installation	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
	Installation	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
Indoor, Distribution (Tight Buffered) Cables	Storage	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)
	Operating	-20°C to +70°C (-4°F to +158°F)	0°C to +70°C (32°F to +158°F)
	Installation	-10°C to +60°C (14°F to +140°F)	0°C to +60°C (32°F to +140°F)
Indoor/Outdoor Cables	Storage	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)
	Operating	-40°C to +70°C (-40°F to +160°F)	-40°C to +70°C (-40°F to +160°F)
	Installation	-20°C to +60°C (-4°F to +140°F)	-0°C to +60°C (-32°F to +140°F)
Stranded Cables			
OSP (Loose Tube) Cables	Storage	-40°C to +70°C (-40°F to +158°F)	–
	Operating	-40°C to +70°C (-40°F to +158°F)	–
	Installation	-30°C to +60°C (-22°F to +140°F)	–

Optical Fiber Cable Technical Information

Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Diameter mm (in)	Weight kg/km (lb/ft)	Tensile Load N (lbf)		Bending Radius mm (in)	
					Installation	Long Term	Installation	Long Term
Outside Plant, Single Loose Tube	4	1 (4)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	6	1 (6)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	8	1 (8)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
	12	1 (12)	8.3 (0.33)	50 (34)	2670 (600)	890 (200)	176 (6.9)	88 (3.5)
Outside Plant, Stranded Loose Tube	24	2 (12)	11.0 (0.43)	100 (67)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	36	3 (12)	11.0 (0.43)	93 (62)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	48	4 (12)	11.0 (0.43)	97 (65)	2670 (600)	890 (200)	242 (9.5)	121 (4.8)
	72	6 (12)	11.9 (0.47)	130 (87)	2670 (600)	890 (200)	252 (9.9)	126 (5.0)
	96	8 (12)	13.6 (0.53)	158 (106)	2670 (600)	890 (200)	287 (11.3)	144 (5.6)
	144	12 (12)	17.6 (0.69)	252 (169)	2670 (600)	890 (200)	364 (14.3)	182 (7.2)
Outside Plant, Armored Single Loose Tube	4	1 (4)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	6	1 (6)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	8	1 (8)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	12	1 (12)	10.9 (0.43)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
Outside Plant, Armored Stranded Loose Tube	24	2 (12)	13.8 (0.55)	214 (144)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	36	3 (12)	13.8 (0.55)	218 (146)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	48	4 (12)	13.8 (0.55)	223 (150)	2670 (600)	890 (200)	315 (12.4)	158 (6.2)
	72	6 (12)	14.8 (0.58)	265 (178)	2670 (600)	890 (200)	335 (13.2)	167 (6.6)
	96	8 (12)	16.7 (0.69)	307 (206)	2670 (600)	890 (200)	378 (14.9)	189 (7.4)
	144	12 (12)	21.4 (0.84)	498 (335)	2670 (600)	890 (200)	455 (17.9)	228 (9)

Optical Fiber Cable Technical Information (Continued)

Cable Type	Fiber Count	Unit Count Units (Fibers/ Unit)	UL/NEC Ratings	Diameter mm (in)	Weight kg/km (lb/ kft)	Tensile Load N (lbf)		Bending Radius mm (in)	
						Installation	Long Term	Installation	Long Term
Interconnect, Simplex	1	1 (1)	OFNR	2.0 (0.08)	5 (3)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNP	2.0 (0.08)	6 (4)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNR	2.9 (0.11)	8 (5)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
			OFNP	2.9 (0.11)	9 (6)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
Interconnect, Zipcord	2	2 (1)	OFNR	2.0 (0.08) x 4.1 (0.16)	8 (5)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNP	2.0 (0.08) x 4.1 (0.16)	10 (7)	40 (9)	12 (3)	50 (1.97)	25 (0.98)
			OFNR	2.9 (0.11) x 5.9 (0.23)	15 (10)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
			OFNP	2.9 (0.11) x 5.9 (0.23)	15 (10)	100 (22)	30 (7)	58 (2.3)	29 (1.1)
Interconnect, Dual	2	1 (2)	OFNR	2.9 (0.11)	7 (5)	100 (22)	30 (7)	57 (2.2)	29 (1.1)
			OFNP	2.9 (0.11)	9 (6)	100 (22)	30 (7)	57 (2.2)	29 (1.1)
			OFNR	4.8 (0.3)	20 (13)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
			OFNP	4.8 (0.3)	30 (20)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
Interconnect, Quad	4	1 (4)	OFNR	4.8 (0.3)	25 (17)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
			OFNP	4.8 (0.3)	30 (20)	100 (22)	30 (7)	96 (3.8)	48 (1.9)
Distribution	6	1 (6)	OFNR	5.2 (0.20)	29 (19)	660 (150)	198 (45)	114 (4.5)	57 (2.2)
			OFNP	4.8 (0.19)	24 (16)	440 (100)	132 (30)	110 (4.3)	55 (2.2)
	8	1 (8)	OFNR	5.7 (0.22)	24 (16)	660 (150)	198 (45)	136 (5.4)	68 (2.7)
			OFNP	5.0 (0.20)	26 (17)	440 (100)	132 (30)	110 (4.3)	55 (2.2)
	12	1 (12)	OFNR	6.0 (0.24)	37 (25)	660 (150)	198 (45)	128 (5)	64 (2.5)
			OFNP	5.7 (0.23)	46 (31)	440 (100)	132 (30)	128 (5)	64 (2.5)
	24	1 (24)	OFNR	8.0 (0.31)	61 (41)	1320 (300)	396 (90)	178 (7)	89 (3.5)
			OFNP	7.7 (0.30)	69 (46)	660 (150)	198 (45)	168 (6.6)	84 (3.3)
	24	2 (12)	OFNR	7.4 x 13.0 (0.29 x 0.51)	87 (58)	1320 (300)	396 (90)	284 (11.2)	142 (5.6)
			OFNP	7.0 x 12.4 (0.28 x 0.49)	92 (62)	660 (150)	198 (45)	264 (10.4)	132 (5.2)
	24	4 (6)	OFNR	13.4 (0.53)	180 (121)	1320 (300)	396 (90)	275 (10.8)	137 (5.4)
			OFNP	13.3 (0.52)	200 (134)	660 (150)	198 (45)	266 (10.5)	133 (5.2)
	36	6 (6)	OFNR	16.4 (0.65)	220 (148)	1320 (300)	396 (90)	342 (13.5)	171 (6.7)
			OFNP	16.0 (0.63)	255 (171)	660 (150)	198 (45)	327 (12.9)	164 (6.4)
	48	4 (12)	OFNR	16.0 (0.63)	250 (168)	1320 (300)	396 (90)	350 (13.8)	175 (6.9)
			OFNP	15.2 (0.60)	202 (136)	660 (150)	198 (45)	312 (12.3)	156 (6.1)
	72	6 (12)	OFNR	18.9 (0.75)	301 (202)	1320 (300)	396 (90)	386 (15.2)	193 (7.6)
			OFNP	18.5 (0.73)	316 (212)	660 (150)	198 (45)	386 (15.2)	193 (7.6)
	96	8 (12)	OFNR	22.8 (0.90)	433 (291)	1320 (300)	396 (90)	462 (18.2)	231 (9.1)
			OFNP	22.0 (0.86)	466 (313)	660 (150)	198 (45)	448 (17.6)	224 (8.8)
	144	12 (12)	OFNR	24.8 (0.98)	461 (310)	1320 (300)	396 (90)	514 (20.2)	257 (10.1)
			OFNP	24.2 (0.95)	474 (319)	660 (150)	198 (45)	514 (20.2)	257 (10.1)
Distribution, Interlocking Armor	6	1 (6)	OFCP	13.1 (0.52)	117 (79)	1335 (300)	400 (90)	197 (7.8)	131 (5.2)
	12	1 (12)	OFCP	13.3 (0.52)	129 (87)	1335 (300)	400 (90)	199 (7.8)	133 (5.2)
	24	1 (24)	OFCP	14.8 (0.58)	176 (119)	1780 (400)	534 (120)	223 (8.8)	148 (5.8)
	24	2 (12)	OFCP	18.9 (0.74)	240 (161)	1780 (400)	534 (120)	192 (7.6)	128 (5.0)
	48	4 (12)	OFCP	23.4 (0.92)	408 (274)	2640 (600)	800 (180)	351 (13.8)	234 (9.2)
	72	6 (12)	OFCP	24.7 (0.97)	537 (361)	2640 (600)	800 (180)	371 (14.6)	247 (9.7)
Indoor/Outdoor, Single Loose Tube	6	1 (6)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	45 (30)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
	8	1 (8)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	46 (31)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
	12	1 (12)	OFNR	6.5 (0.26)	45 (30)	1335 (300)	400 (90)	97 (3.8)	65 (2.6)
			OFNP	6.6 (0.26)	46 (31)	1335 (300)	400 (90)	99 (3.9)	66 (2.6)
Indoor/Outdoor, Stranded Loose Tube	24	2 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	36	3 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	48	4 (12)	OFNR	10.1 (0.40)	84 (56)	2670 (600)	890 (200)	151 (5.9)	101 (4.0)
			OFNP	9.7 (0.38)	86 (58)	2670 (600)	890 (200)	145 (5.7)	97 (3.8)
	72	6 (12)	OFNR	11.9 (0.47)	111 (75)	2670 (600)	890 (200)	178 (7.0)	119 (4.7)
			OFNP	11.7 (0.46)	101 (68)	2670 (600)	890 (200)	175 (6.9)	117 (4.6)
	96	8 (12)	OFNR	13.7 (0.54)	147 (99)	2670 (600)	890 (200)	206 (8.1)	137 (5.4)
			OFNP	13.5 (0.53)	175 (118)	2670 (600)	890 (200)	203 (8.0)	135 (5.3)
	144	12 (12)	OFNR	17.8 (0.70)	252 (169)	4448 (1000)	1335 (300)	267 (10.5)	178 (7.0)
			OFNP	17.7 (0.70)	300 (202)	4448 (1000)	1335 (300)	255 (10.1)	170 (6.7)

Optical Fiber Connector Termination Comparison Chart

		LightCrimp Plus LC, SC, ST	Epoxy/Polish LC, SC, ST
Termination Technology	Epoxy Required	NO	YES
	Polish Required	NO	YES
	Crimp Required	YES	YES
Setup Time	(Each Location)	< 2 Minutes	< 12 Minutes
Installation Time	(Each Fiber)	~ 1 Minute	7 – 25 Minutes
Connector Cost	(Relative)	Higher	Lower
Installation Labor Cost	(Relative)	Lower	Higher
Tool Kit Cost	(Relative)	Lower	Higher
Skill Level	(Relative)	Lower	Higher
Training Time	(Relative)	Short	High

NOTE: Entries for time and cost are estimates and relative comparisons. Actual results will vary depending on experience level and conditions at time of termination.

Jack, Plug and Insert Compatibility List

Description		Part Number	SL Series MT-RJ and MT-RJ SECURE Outlet Jacks	MT-RJ and MT-RJ SECURE Patch Panel Jacks	LightCrimp Plus			Epoxy/Polish		
					LC	SC	ST	LC	SC	ST
SL Series Modules	2-Port	1116409	X	–	–	–	–	–	–	–
	2-Port	1116406	X	–	–	–	–	–	–	–
	3-Port	1116408	X	–	–	–	–	–	–	–
	Duplex SC, Single-mode	1375306	–	–	–	X	–	–	X	–
	Duplex SC, Multimode	1375123	–	–	–	X	–	–	X	–
	Duplex SC to ST, Multimode	1375241	–	–	–	X	X	–	X	X
SL Series Inserts	ST, Multimode	1339123	–	–	–	–	X	–	X	X
	ST, Single-mode	1479181	–	–	–	–	X	–	–	X
	LC Duplex, Multimode	1435735	–	–	X	–	–	X	–	–
	LC Duplex, Single-mode	1435799	–	–	X	–	–	X	–	–
	MT-RJ SL Series Housing, Single-mode/Multimode	1374416	X*	X	–	–	–	–	–	–
	HIDEAWAY and HIDEOUT SC Duplex, Multimode	5504640	–	–	–	X	–	–	X	–
HIDEAWAY and HIDEOUT	SC Duplex to Dual ST, Multimode	5504663	–	–	–	X	X	–	X	X
HIDEAWAY and HIDEOUT	Dual ST, Multimode	504662	–	–	–	–	X	–	–	X
HIDEAWAY and HIDEOUT	MT-RJ Parallel Dress Clips, 1-Port	1374206	X**	X	–	–	–	–	–	–
HIDEAWAY and HIDEOUT	MT-RJ Parallel Dress Clips, 2-Port	1374205	X**	X	–	–	–	–	–	–
Surface Mount Inserts	1-Port	1116098	X	–	–	–	–	–	–	–
Surface Mount Inserts	2-Port	557775	X	–	–	–	X	–	–	X
Surface Mount Inserts	2-Port	557350	–	–	–	–	–	–	–	–
Universal Office Box Inserts	ST, Multimode	1479495	–	–	–	–	X	–	–	X
ACO Dual-Port Faceplate	Dual - SC Duplex, Multimode	503662	–	–	–	X	–	–	X	–
ACO Dual-Port Faceplate	Quad - ST, Multimode	502604	–	–	–	–	X	–	–	X
ACO Dual-Port Faceplate	Dual - ST, Multimode	502604	–	–	–	–	X	–	–	X
AFWM Flush Faceplates	Dual - SC Duplex, Multimode	557322	–	–	–	X	–	–	X	–
AFWM Flush Faceplates	Quad - ST, Multimode	557474	–	–	–	–	X	–	–	X
Optical Fiber MUO Mod	MT-RJ Jack, Single-mode/Multimode	1375347	X**	X	–	–	–	–	–	–
Optical Fiber MUO Mod	SC Duplex, Multimode	406818	–	–	–	X	–	–	X	–
Optical Fiber MUO Mod	SC Duplex to Dual ST, Multimode	406819	–	–	–	X	X	–	X	X
Optical Fiber MUO Mod	Dual ST, Multimode	406820	–	–	–	–	X	–	–	X

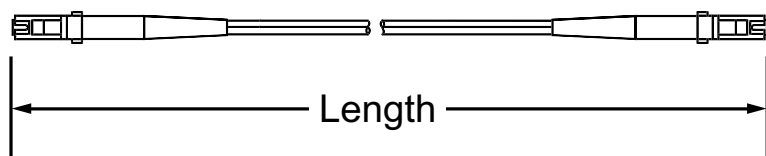
*Note: SL Series MT-RJ Outlet Jacks come with SL Series MT-RJ Housing.

**Note: SL Series Housing is not used when using SL Series MT-RJ Outlet Jacks with MT-RJ Parallel Dress Clips or MT-RJ Jack MUO Modules.

Jack, Plug and Insert Compatibility List

Test Description	FOTP*	Requirement
Visual and Mechanical Inspection:	MT-RJ 13	TIA/EIA-604-12 (FOCIS 12)
Visual and Mechanical Inspection:	SC 13	TIA/EIA-604-3 (FOCIS 3)
Visual and Mechanical Inspection:	ST 13	TIA/EIA-604-2 (FOCIS 2)
Visual and Mechanical Inspection:	LC 13	TIA/EIA-604-10 (FOCIS10)
Attenuation	34	< 0.75 dB
Return Loss	107	< -20 dB
Low Temperature (0° C for 4 days)	188	< 0.3 dB change
Temperature Life (55° C for 14 days)	7	< 0.3 dB change
Humidity (90 to 95% @ 40° C for 4 days)	5	< 0.3 dB change
Impact (8 drops from 1.8 m)	2	< 0.75 dB IL, < -20 dB RL
Durability (500 cycles)	21	< 0.75 dB IL, < -20 dB RL
Cable Retention (0° and 90°)	6	< 0.75 dB IL, < -20 dB RL
Flex (100 cycles)	1	< 0.75 dB IL, < -20 dB RL
Twist (10 cycles)	36	< 0.75 dB IL, < -20 dB RL

Optical Fiber Cable Assembly Length Reference



Meter to Foot and Inch Reference

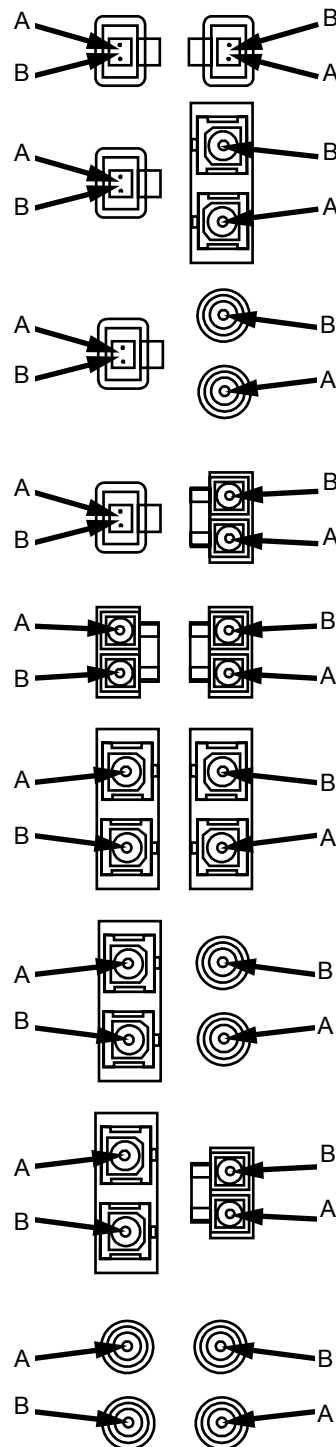
Length in Meters	Length in Feet	Length in Inches
1	3.28	39.37
2	6.56	78.74
3	9.84	118.11
4	13.12	157.48
5	16.40	196.85
6	19.68	236.21
7	22.96	275.59
8	26.25	314.96
9	29.52	354.33
10	32.80	393.70
20	65.62	787.40
30	98.42	1181.10
40	131.23	1574.80
50	164.04	1968.50
60	196.85	2362.20
70	229.66	2755.90
80	262.47	3149.60
90	295.27	3543.30
100	328.08	3937.00
110	360.89	4330.69
120	393.70	4724.39
130	426.51	5118.09
140	459.32	5511.79
150	492.12	5905.49
160	524.93	6299.19
170	557.74	6692.89
180	590.55	7086.59
190	623.36	7480.29
200	656.17	7873.99

Note: Conversion chart is for reference only and does not imply actual assembly length.

Fiber Polarity

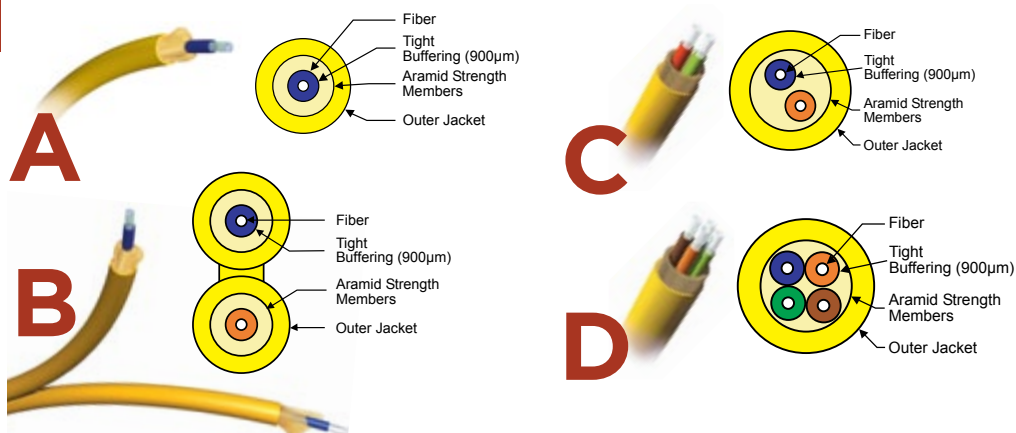
Fiber Color	End 1 Connector	End 2 Connector
White	A	B
Blue	B	A

10



OS1 Single-mode Optical Fiber Interconnect Cable

10

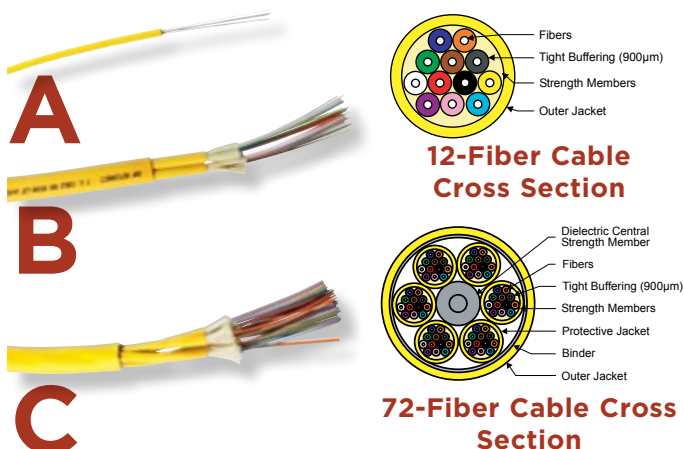


- Suitable for direct termination with epoxy/polish, LightCrimp, LightCrimp PLUS, and MT-RJ jacks for use in pigtails, and patch cords
- Simplex and zipcord cables are additionally suitable for use in internal equipment connections
- Aramid yarn reinforcement
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Outer Jacket Color: Yellow
- Hybrid cables and other jacket colors are available
- OS1 single-mode fibers conform to IEC 60793-2-10 B1.3 specifications for low water peak OS1 fibers
- See Customer Specification 114-92001 at www.ampnetconnect.com for additional information



Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Figure	Riser (OFNR)	Plenum (OFNP)
Simplex (2.0mm)	1	1 (1)		7-1553406-3	7-1553407-3
Simplex (2.9mm)	1	1 (1)	A	7-1553408-3	7-1553409-3
Zipcord (2.0mm)	2	2 (1)		7-1553410-3	7-1553411-3
Zipcord (2.9mm)	2	2 (1)	B	7-1553412-3	7-1553413-3
Dual (2.9 mm)	2	1 (2)	C	7-1553414-3	7-1553415-3
Dual (4.8 mm)	2	1 (2)		7-1553416-3	7-1553417-3
Quad (4.8 mm)	4	1 (4)	D	7-1553418-3	7-1553419-3

OS1 Single-mode Optical Fiber Distribution Cable



- Suitable for horizontal and in-building backbone cabling and for direct termination with epoxy/polish, LightCrimp, LightCrimp PLUS and MT-RJ jacks
- Strippable 900 µm tight buffer coating allows for easy connectorization
- TIA color-coded fibers for easy identification
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)

- Outer Jacket Color: Yellow
- Hybrid cables and other jacket colors are available
- OS1 single-mode fibers conform to IEC 60793-2-10 B1.3 specifications for low water peak OS1 fibers
- See Customer Specification 114-92000 at: www.ampnetconnect.com for additional information



Fiber Count	Unit Count Unit (Fibers/Unit)	Figure	Riser (OFNR)	Plenum (OFNP)
6	1 (6)	A	7-1553307-3	7-1553308-3
8	1 (8)		7-1553309-3	7-1553310-3
12	1 (12)		7-1553311-3	7-1553312-3
	1 (24)		7-1553313-3	7-1553314-3
24	2 (12)	B	7-1553315-3	7-1553316-3
	4 (6)		7-1553317-3	7-1553318-3
36	6 (6)		7-1553319-3	7-1553320-3
48	4 (12)	C	7-1553321-3	7-1553322-3
72	6 (12)		7-1553323-3	7-1553324-3
96	8 (12)		7-1553325-3	7-1553326-3
144	12 (12)		7-1553327-3	7-1553328-3

OS1 Single-mode Interlocking Armor Optical Fiber Distribution Cable

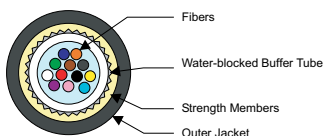


- Robust construction provides extra protection for optical fibers
- Interlocking armor enhances flexibility
- Lightweight aluminum armor simplifies handling
- Installer-friendly plenum rated over-jacketing makes cable pulls easier
- Over-jacketing color: Orange
- Hybrid cables and other jacket colors are available
- Pending local codes, may eliminate the need for innerduct
- OFCP (Plenum) rated
- TIA Color Coded fibers
- Strippable 900 μ m tight buffer coating allows for easy connectorization
- Indoor/Outdoor and specialty versions available
- OS1 single-mode fibers conform to IEC 60793-2-10 B1.3 specifications for low water peak OS1 fibers

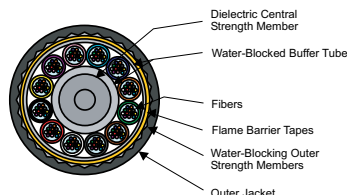
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Fiber Count	Unit Count Units (Fibers/Unit)	Figure	UL/NEC Ratings	Part Number
6	1 (6)		Plenum (OFCP)	4-1777121-7
12	1 (12)		Plenum (OFCP)	4-1777117-7
24	1 (24)	A	Plenum (OFCP)	7-1553420-3
	2(12)		Plenum (OFCP)	4-1777122-7
48	4 (12)		Plenum (OFCP)	4-1777123-7
72	6 (12)		Plenum (OFCP)	4-1777124-7

OS2 Single-mode Optical Fiber Indoor/Outdoor Cable



12-Fiber Cable Cross Section



144-Fiber Cable Cross Section

- Suitable for in-building and inter-building backbone cabling
- Can eliminate the need for a transition point and splicing when entering buildings - go directly from outdoors into building riser or plenum spaces
- Water-blocked buffer tube for water penetration protection
- Flame-retardant UV-protected jacket for harsh outdoor environments
- All-dielectric construction
- UL and cUL listed OFNR (Riser) or OFNP (Plenum)
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Water-blocked buffer tube for water penetration protection
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - Outer Jacket Color is Black for all Fiber Types
 - Hybrid cables and other jacket colors are available
 - Reverse oscillating lay construction for easy midspan access
 - Dry water blocking technology
 - TIA color-coded fibers in TIA color-coded tubes for easy identification
- See Customer Specification 114-92002 at: www.ampnetconnect.com for additional information



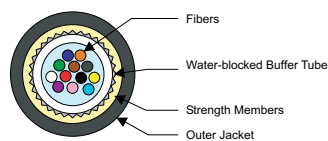
Cable Type	Fiber Count	Unit Count Unit (Fibers/Unit)	Figure	Riser (OFNR)	Plenum (OFNP)
Single Loose Tube	6	1 (6)	A	6-1553342-3	6-1553343-3
	8	1 (8)		6-1553344-3	6-1553345-3
	12	1 (12)		6-1553346-3	6-1553347-3
Stranded Loose Tube	24	2 (12)	C	6-1553348-3	6-1553349-3
	36	3 (12)		6-1553350-3	6-1553351-3
	48	4 (12)		6-1553352-3	6-1553353-3
	72	6 (12)		6-1553354-3	6-1553355-3
	96	8 (12)		6-1553356-3	6-1553357-3
	144	12 (12)		6-1553358-3	6-1553359-3

OS2 Single-mode Optical Fiber Outside Plant (OSP) Cable

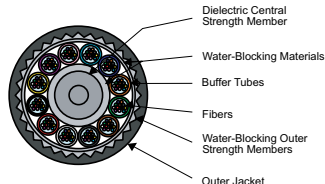
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A



12-Fiber Cable Cross Section

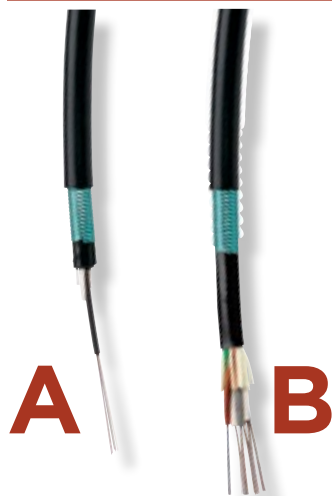


144-Fiber Cable Cross Section

- Suitable for inter-building backbone cabling (aerial, duct or direct burial)
- Dry water-blocking technology
- UV-protected jacket for harsh outdoor environment
- Low friction jacket for ease of pulling through ducts
- All-dielectric construction
- Outer Jacket Color is Black for all Fiber Types
- See Customer Specification 114-92003 at: www.ampnetconnect.com for additional information
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - Reverse oscillating lay construction for easy midspan access
 - TIA color-coded fibers and buffer tubes for easy identification

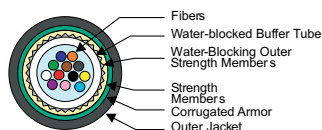
Fiber Count	Unit Count Units (Fibers/Unit)	Figure	Part Number
4	1 (4)		6-1553386-3
6	1 (6)		6-1553387-3
8	1 (8)		6-1553388-3
12	1 (12)		6-1553389-3
24	2 (12)		6-1553390-3
36	3 (12)		6-1553391-3
48	4 (12)		6-1553392-3
72	6 (12)		6-1553393-3
96	8 (12)		6-1553394-3
144	12 (12)	A	6-1553395-3

OS2 Single-mode Optical Fiber Outside Plant Armored (OSPA) Cable

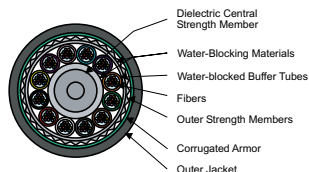


A

B



12-Fiber Cable Cross Section



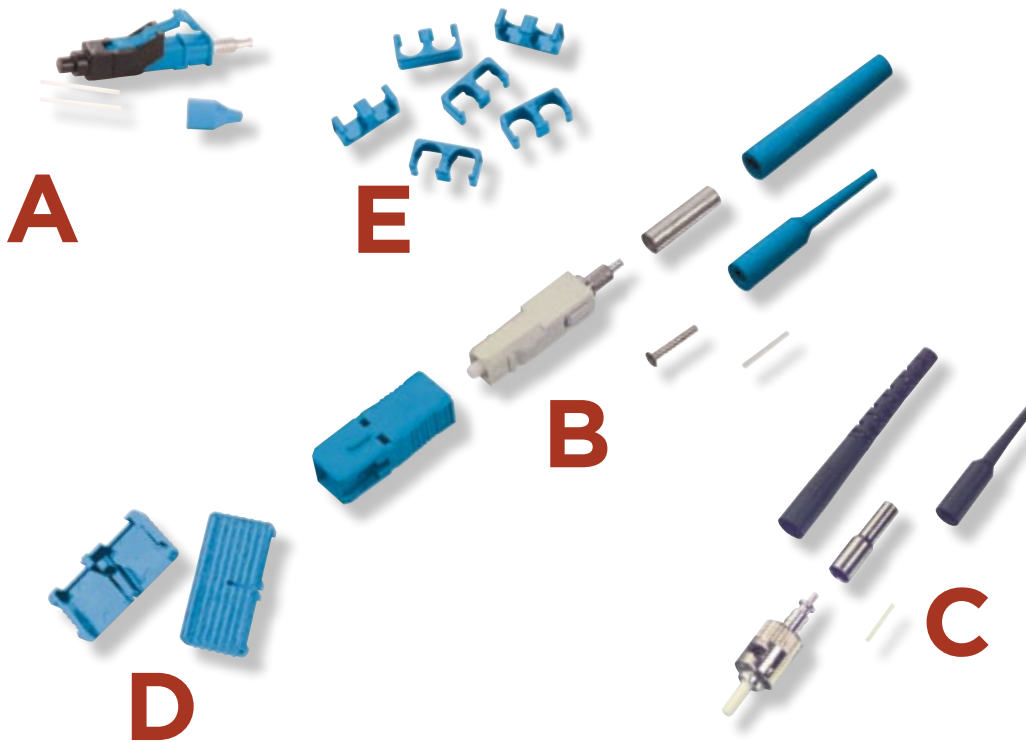
144-Fiber Cable Cross Section

- Suitable for inter-building backbone cabling (aerial, duct or direct buried)
- Dry water-blocking technology
- UV-protected jacket for harsh outdoor environment
- Low friction jacket for ease of pulling through ducts
- Corrugated steel tape armor for rugged environments and rodent protection
- Outer jacket color: black
- See Customer Specification 114-92003 at: www.ampnetconnect.com for additional information
- Single loose tube cables:
 - TIA color-coded fibers for easy identification
 - Small diameter single tube construction saves space inside ducts
- Stranded loose tube cables:
 - TIA color-coded fibers and buffer tubes for easy identification
 - Reverse oscillating lay construction for easy midspan access
 - Hybrid cables (with single-mode and multimode fibers) are available to provide a built-in migration path for future applications that will require single-mode fibers

Cable Type	Fiber Count	Unit Count Units (Fibers/Unit)	Figure	Part Number
Single Loose Tube	4	1 (4)		6-1553396-3
	6	1 (6)	A	6-1553397-3
	8	1 (8)		6-1553398-3
	12	1 (12)		6-1553399-3
Stranded Loose Tube	24	2 (12)		6-1553400-3
	36	3 (12)		6-1553401-3
	48	4 (12)	B	6-1553402-3
	72	6 (12)		6-1553403-3
	96	8 (12)		6-1553404-3
	144	12 (12)		6-1553405-3

Single-mode LightCrimp PLUS Connectors (No-epoxy/No-polish)

10



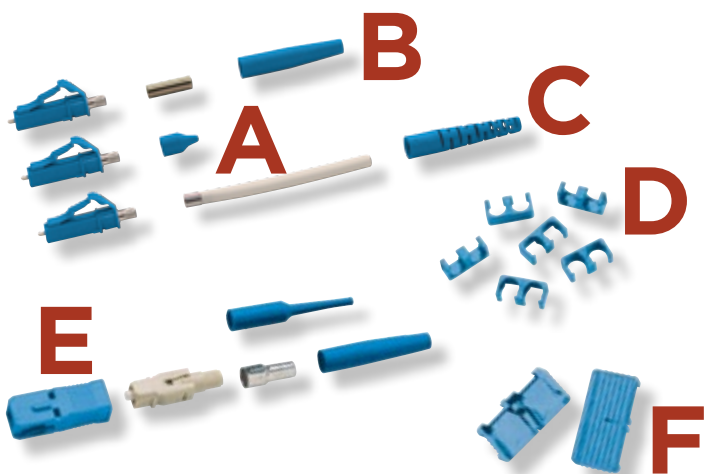
- Easy installation:
- No epoxy, no polishing
- No bench tool required
- Strip, cleave, and crimp
- Match fiber type of cable to fiber type of LightCrimp Plus connector
- Mates with standard couplers, adapters, and adapter plates
- LC small form factor design is half the size of SC
- Select appropriate part number for termination to:
 - 900 μ m tight-buffered fiber or 250 μ m coated fiber
 - 1.6 – 2.0 mm jacketed fiber
 - 3 mm jacketed fiber
- LC connector clip turns simplex connectors into duplex connectors and allows for polarity correction after termination
- Termination tool kits in Chapter 22

Connector Type	Housing Color	Boot Color	Used With	Figure	Part Number
LC Simplex, APC	Green	Blue	900 μ m buffered and 250 μ m coated fibers		2064181-1
LC Simplex	Blue	Blue	900 μ m buffered and 250 μ m coated fibers	A	6754482-1
			1.6 to 2.0 mm Jacketed Cable		1918626-1
SC Simplex, APC	Green	Blue	900 μ m buffered and 250 μ m coated fibers		2064184-1
SC Simplex	Blue	Blue	900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	B	6693276-1
ST	Metallic	Black	900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	C	1828953-3
Duplex LC Clip, package of 6	Blue	–	Simplex LC Connectors	D	1754371-4
1/2 Duplex SC Clip (two are required to make a complete clip)	Blue	–	Simplex SC Connectors	E	6348522-3

Note: APC (Angle Polish Connector) connectors are for use with other APC products.

Single-mode Epoxy/Polish Connectors

10



- Each connector kit comes with accessories needed to terminate to 250 μ m fiber, 900 μ m tight-buffered fiber, 900 μ m easy-strip, buffer tube splitter kits, 2 mm or 3 mm cable (select appropriate part number)
- Suitable for use with heat-cured or anaerobic (quick cure) adhesive
- See Instruction Sheet for recommended anaerobic adhesive
- Mates with standard couplers, adapters, and adapter plates
- LC small form factor design is half the size of SC
- Pre-radiused ceramic ferrules for easy polishing
- Duplex SC can be assembled using two Simplex SC connectors and one duplex clip
- Boot type and coupling nut options (select appropriate part number)



Description	Housing Color	Boot Color	Used With	Figure	Part Number
LC Simplex	Blue	Blue	900 μ m buffered and 250 μ m coated fibers	A	1918384-1
			1.6 to 2 mm Jacketed Cable	B	1918266-1
			3.0 mm Jacketed Cable	C	1918374-1
Duplex LC Clip, package of 6	Blue	–	Simplex LC Connectors	D	1754371-4
SC Simplex	Blue	Blue	900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	E	5504646-7
			3 mm Jacketed Cable		5504646-1
			900 μ m buffered and 250 μ m coated fibers	E	5492123-1
			2 mm Jacketed Cable		5504934-2
SC Duplex	Blue	Blue	3 mm Jacketed Cable		5504655-1
1/2 Duplex SC Clip (two are required to make a complete clip)	Blue	–	Simplex SC Connectors	F	6348522-3
ST	Metalic	Yellow	900 μ m buffered fibers, and 250 μ m coated fibers		5503613-2
			900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	G	5502579-2
			900 μ m buffered fibers, 250 μ m coated fibers, and 3 mm Jacketed Cable	G	5502580-2

LightCrimp Splice

A



B



Insert First Fiber and Complete Buffer Crimp



Insert Second Fiber and Actuate Crimp

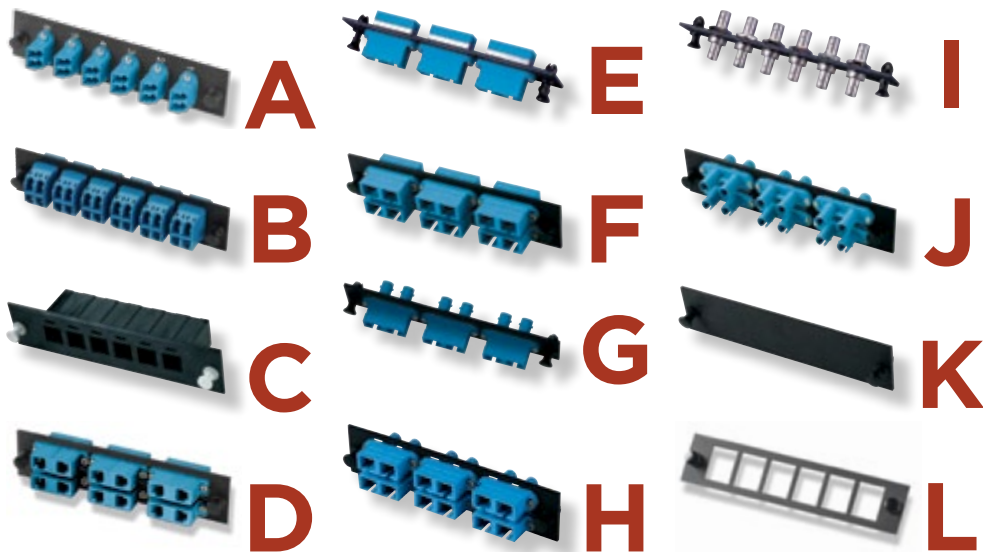


Complete Second Buffer Crimp and Remove Splice from Tool

- Terminates 250 μ m coated, 900 μ m tight-buffered, and
- 2.0 mm jacketed fibers
- Use with multimode and single-mode 125 μ m diameter fibers
- No epoxy, set-up, or workstation required
- Use Termination Tool Kit part number 1553212-1, See Chapter 22
- Splice Performance Characteristics:
 - Attenuation: Typical 0.1 dB
 - Return Loss: (at ambient: 18 to 28° C) >20 dB Multimode >35 dB Single-mode
 - Operating Temperature: -25 to 70° C
- Tensile Retention:
 - 250 μ m coated: 2.0 N
 - 900 μ m buffered: 3.0 N
 - Jacketed: 50 N

Description	Figure	Part Number
LightCrimp Splice for 250 μ m Coated and 900 μ m tight-buffered Fibers	A	1985374-1
LightCrimp Splice for 2.0 mm Jacketed Fiber	B	1985805-1

Single-mode Snap-in Adapter Plates



- All Snap-in Adapter Plates fit AMP NETCONNECT unloaded Optical Fiber Enclosures, see Chapter 15
- MT-RJ Jack Adapter Plates:
 - Hold up to six (6) MT-RJ (standard or secure) Jacks or Pigtail Jack Cable Assemblies
 - Accepts labeling icons
- MT-RJ Plug Adapter Plates hold up to twelve (12) MT-RJ Plugs (standard only)
- Package quantity = 1 per pack
- SL Series multimedia adapter plates accept SL Series jacks and inserts

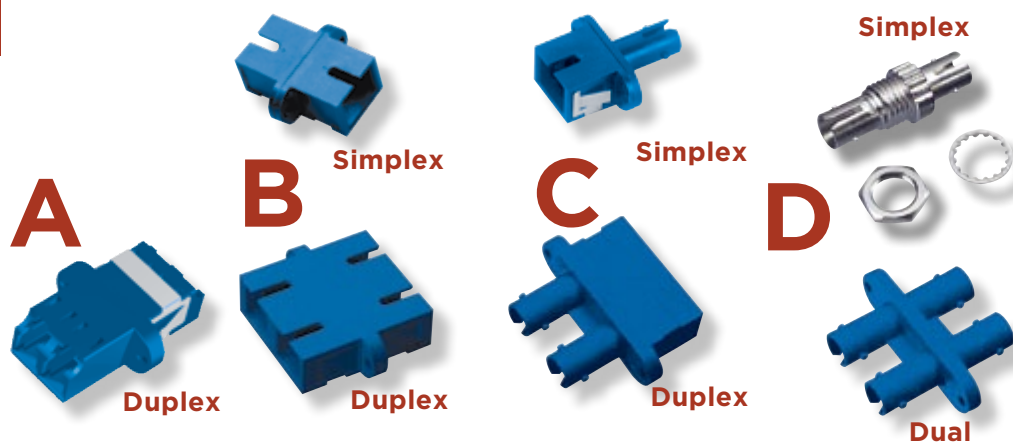
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Coupling Adapter	Fibers	Duplex Ports	Coupler Count	Adapter Color	Figure	Part Number
LC Duplex	12	6	6	Blue	A	1374463-1
	24	12	12	Blue	B	1435516-1
LC Duplex, APC	12	6	6	Green		1374463-6
	24	12	12	Green		1435516-6
MT-RJ, Holds 6 Jacks	12	6	—	—	C	1278328-3
MT-RJ, 12 Plugs	24	12	—	Blue	D	1435440-3
SC Simplex	6	3	3	Blue		559517-1
SC Simplex, APC	6	3	3	Green		559517-2
SC Duplex	6	3	3	Blue	E	559558-2
	12	6	6	Blue	F	559596-2
SC Duplex, APC	6	3	3	Green		559558-7
	12	6	6	Green		559596-3
SC Duplex to Dual ST	6	3	3	Blue	G	559601-6
	12	6	6	Blue	H	1278368-5
ST	6	3	6	Metallic	I	559515-2
	12	6	6	Blue	J	1278567-2
MPO	—	—	6	Black		1374598-1
Blank	—	—	—	—	K	559523-1
SL Series Multimedia Adapter Plate	—	—	—	—	L	1479506-1

Note: APC (Angle Polish Connector) connectors are for use with other APC products.

Single-mode Couplers & Adapters

10



Simplex

Simplex

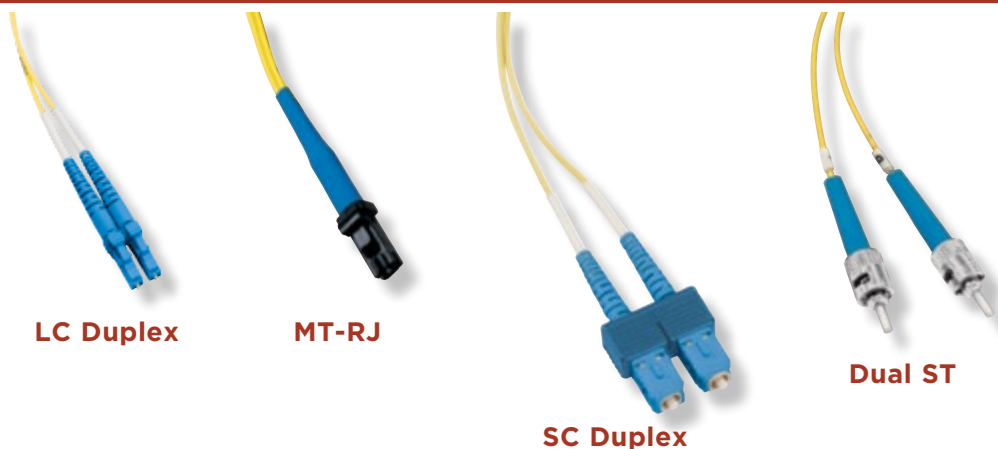
Simplex

Dual

- MT-RJ Couplers mate multimode or single-mode MT-RJ Plugs
- Duplex coupler mates four MT-RJ Plugs (4-fibers total, 2-fibers/mated pair)
- Simplex coupler mates two MT-RJ Plugs (2-fibers total, 2-fibers/mated pair)
- Mounting screws are available for couplers with mounting tabs (flanged)
- FOCIS - compliant designs
- For 504021, to order bulk packaging (50 per pack) use 504021-2

Description	Color	Figure	Simplex	Duplex	Quadplex (Dual Duplex)
MT-RJ Coupler	Almond		1278017-1	6374906-1	—
LC Coupler	Blue	A	1457062-1	6457567-4	1695790-4
SC Coupler	Blue	B	5502632-8	1-5502776-1	—
SC to ST Coupling Adapter	Blue	C	5502780-2	5503137-5	—
ST Coupler	Metallic/Blue	D	504021-1	503273-5	—

Single-mode LC Cable Assemblies



LC Duplex

MT-RJ

SC Duplex

Dual ST

- LC, SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Each MT-RJ Connector houses two fibers
- Other lengths available, see customer drawings for details
- Yellow cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
LC Duplex	LC Duplex	1906856-1	1906856-2	1906856-3	1906856-5	1-1906856-0
	MT-RJ	6374645-1	6374645-2	6374645-3	6374645-5	1-6374645-0
	SC Duplex	1906768-1	1906768-2	1906768-3	1906768-5	1-1906768-0
	ST (Dual)	1906812-1	1906812-2	1906812-3	1906812-5	1-1906812-0

Single-mode MT-RJ Cable Assemblies

10

						- SC and ST connectors feature ceramic ferrules - Cable assemblies are riser (OFNR) rated - Each MT-RJ Connector houses two fibers	- Other lengths available, see customer drawings for details - Yellow cable jacketing
End 1	Connector End 2	1 m	2 m	Length 3 m	5 m	10 m	
MT-RJ	MT-RJ	6278033-1	6278033-2	6278033-3	6278033-5	1-6278033-0	
	SC Simplex	6278030-1	6278030-2	6278030-3	6278030-5	1-6278030-0	
	SC Duplex	6278031-1	6278031-2	6278031-3	6278031-5	1-6278031-0	
	ST (Dual)	6278298-1	6278298-2	6278298-3	6278298-5	1-6278298-0	

Single-mode SC Cable Assemblies



SC Duplex



Dual ST

- SC and ST connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Other lengths available, see customer drawings for details
- Yellow cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
SC Duplex	SC Duplex	1907435-1	1907435-2	1907435-3	1907435-5	1-1907435-0
	ST (Dual)	1907357-1	1907357-2	1907357-3	1907357-5	1-1907357-0

Single-mode ST Cable Assemblies



Dual ST

- Connectors feature ceramic ferrules
- Cable assemblies are riser (OFNR) rated
- Other lengths available, see customer drawings for details
- Yellow cable jacketing

Connector		Length				
End 1	End 2	1 m	2 m	3 m	5 m	10 m
ST (Dual)	ST (Dual)	1907437-1	1907437-2	1907437-3	1907437-5	1-1907437-0

Single-mode Pigtail (Single-Ended) Cable Assemblies

- Splice-able pigtail assemblies 250 µm coated fiber in protective 900 µm tubing		Compatible with fusion or mechanical splices		- Each MT-RJ Connector houses two fibers - MT-RJ Plugs are pinned	
Connector End	Cable Type	1 m	Length 2 m	3 m	
LC Simplex	2 mm Jacketed With One 250 µm coated fiber in protective 900 µm tubing	6754401-1	—	—	
MT-RJ Jack, Black Housing	Dual 250 µm coated fibers in 900 µm tubing	6374020-1	6374020-2	6374020-3	
MT-RJ Plug, Black	Dual 250 µm coated fibers in 900 µm tubing	6693533-1	6693533-2	6693533-3	
SC Simplex, APC	3 mm Jacketed With One 250 µm coated fiber in protective 900 µm tubing	5492193-1	5492193-2	5492193-3	
SC Simplex	3 mm Jacketed With One 250 µm coated fiber in protective 900 µm tubing	5492081-1	5492081-2	5492081-3	
	Single 250 µm coated fibers in 900 µm tubing	5492065-1	5492065-2	5492065-3	

Note: APC (Angle Polish Connector) connectors are for use with other APC products.

Single-mode MT-RJ Pigtail Jack Accessories

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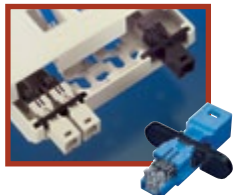
A



B



- Parallel Dress Clips:
 - 1-Port clip holds one MT-RJ Jack (sold separately)
 - 2-Port clip holds two MT-RJ Jacks (sold separately)
 - Allow use of MT-RJ Jacks in faceplates and outlets that hold flanged optical fiber adapters



•

- Can be used with HIDEAWAY and HIDEOUT outlets (Chapter 06)

• Bend Limiting Boots:

- Compatible with all MT-RJ Jacks
- Comes in a package of six
- Protects fiber transition at back of MT-RJ Jack

C



D



- SL Series housing easily snap into SL Series Modules, mounting straps, patch panels, and faceplates
- SL Series housing accepts one MT-RJ Jack sold separately
- MT-RJ Outlet Jacks not included with any accessory listed here

Description		Package Quantity	Figure	SL Series Housing Color	Part Number
Parallel Dress Clip	1-Port (Accepts 1 MT-RJ Jack)	6	A	—	1374206-1
	2-Port (Accepts 2 MT-RJ Jacks)	3	B	—	1374205-1
Bend Limiting Boot	Blue	6	C	—	6374208-6
			D	Almond	1374416-1
				Black	1374416-2
				White	1374416-3
				Gray	1374416-4
				Orange	1374416-5
				Blue	1374416-6
				Red	1374416-7
				Yellow	1374416-8
				Green	1374416-9
				Violet	1-1374416-0
				Electrical Ivory	1-1374416-1
				Rose	2-1374416-3
				Aqua	2-1374416-4
				Brown	2-1374416-5
				Slate	2-1374416-6
SL Series Housing	1-Port (Accepts 1 MT-RJ Jack)	1			

Single-mode LC Test Kits

- Test Kits includes:
 - Cable Assemblies
 - LC Duplex Clips
 - Mandrels
 - Carrying case
- Test Kits for LC SECURE Connector Systems also available
- See "FIELD TESTING LC OPTICAL FIBER SYSTEMS" White Paper (available on-line at www.ampnetconnect.com) for test details

Description	Part Number
For use with Dual Fiber Testers with SC Transmit and LC Recieve Ports	1828869-1
For use with Dual Fiber Testers with ST Transmit and LC Recieve Ports	1828869-2
For use with Dual Fiber Testers with LC Transmit and LC Recieve Ports	1828869-3

Replacement Components for Single-mode LC Test Kits

- Assemblies are 3m in length
- Assemblies are Simplex style
- Cable Assemblies are riser (OFNR) rated

Description	Part Number
LC Duplex Clips (pack of 6)	1754371-4
LC to SC Simplex Assembly, 3m	1907489-3
LC to ST Simplex Assembly, 3m	1907492-3
LC to LC Simplex Assembly, 3m	1907495-3

Single-mode MT-RJ Loopbacks

Description	Part Number
MT-RJ Loopback	6278358-1

Single-mode MT-RJ Test Kits



- Each test kit includes:
 - 1 - MT-RJ Adapter
 - 2 - MT-RJ (no pins) to SC Simplex or ST Cable Assemblies
 - 1 - MT-RJ (with pins) to SC Simplex or ST Cable Assembly
 - 1 - MT-RJ to MT-RJ Cable Assembly
 - 1 - Carrying case
- Test Kits for MT-RJ SECURE Connector Systems also available
- See "MT-RJ OPTICAL FIBER SYSTEMS TESTING" White Paper (available on-line at www.ampnetconnect.com) for details

Equipment Transmit Port	Part Number
SC	1278863-1
ST	1278863-2

Replacement Components for Single-mode MT-RJ Test Kits

- All assemblies are 4 m in length
- Pinned MT-RJ Cable Assemblies are used for testing only
- Cable Assemblies are riser-rated

Description	Connector End 1	Connector End 2	Part Number
Replacement Cable Assemblies	Unpinned MT-RJ	Unpinned MT-RJ	6435096-3
	Unpinned MT-RJ	SC	6435092-3
	Unpinned MT-RJ	ST-style	6435094-3
	Pinned MT-RJ	SC	6435092-6
	Pinned MT-RJ	ST-style	6435094-6
Replacement Coupler	MT-RJ Plug	MT-RJ Plug	1278017-1



10-16

<http://www.ampnetconnect.com>



Tyco Electronics



11

MRJ21 Cassettes02

MRJ21 Cassette Panel.....02

Cable Support Bars02

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MRJ21 Label Holder Panels and Labels03

MRJ21 Cable Assemblies.....04

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System Polarity with MPO Pair-Flipped AB/BA Trunk Cable06

System Polarity with PARA-OPTIX Pair-Straight AB/AB Trunk Cable06

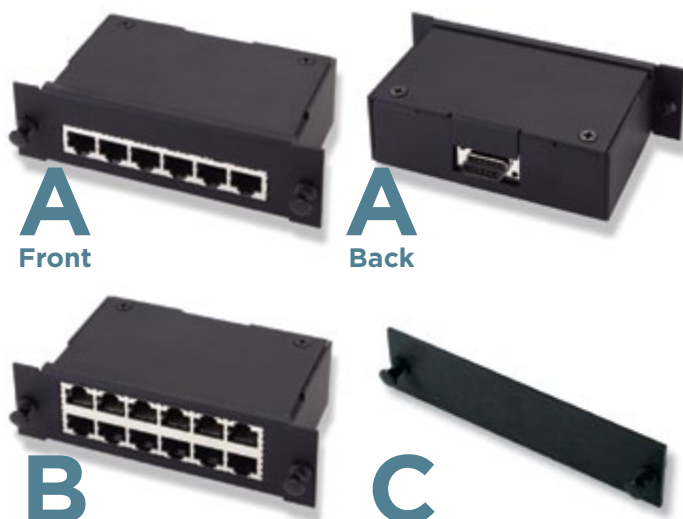
PARA-OPTIX Backbone Enclosure Kit.....07

PARA-OPTIX MPO-style Trunk Cable Assembly07

MPO Trunk Cable Assemblies..... 08-09

MPO Optical Fiber Cassettes10

MRJ21 Cassettes



- High-performance copper cabling solution
- High-density, small form factor connectivity
- Factory terminated and tested
- Modular, pluggable design
- 6-Port cassettes support applications which use four or fewer pairs including 10BASE-T, 100BASE-T and 1000BASE-T
- 12-Port cassettes support applications which use two or fewer pairs including 10BASE-T, and 100BASE-T
- Blank adapter plate for MRJ21 (1479451-1) panel only – Do not use 1777046-1 with optical fiber enclosures

Description	Port Count	Applications	Active Pairs Per Port	Figure	MRJ21 Connections (Back)	Part Number
Cassette	6	10/100/1000BASE-T	4	A	1	1479459-1
	12	10/100BASE-T	2	B	1	1479452-1
Blank	–	–	–	C	–	1777046-1

MRJ21 Cassette Panel



- Accepts up to three (3) MRJ21 cassettes

Description	Accepts	Part Number
MRJ21 Cassette Panel	3 MRJ21 Cassettes	1479451-1

Cable Support Bars



- Mounts to the back of 19 inch racks
- Designed to provide additional cable support and routing control behind 19 inch racks and panels
- MRJ21 slotted manager bar for easy tie down
- Horizontal and vertical mounting option for MRJ21 tie down bar

Description	Depth	Figure	Part Number
Standard Support Bar	5"	A	557548-1
	6"	B	1933352-1
MRJ21 Cable Manager Bar	9"		1933352-2
	12"		1933352-3
	16"		1933352-4

MRJ21 Patch Panels

11



- High-performance copper cabling solution
- High-density, small form factor connectivity
- Factory terminated and tested
- Modular, pluggable design
- 4-Pair MRJ21 Patch Panels support applications which use four or fewer pairs including 10BASE-T, 100BASE-T and 1000BASE-T
- 2-Pair MRJ21 Patch Panels support applications which use two or fewer pairs including 10BASE-T, and 100BASE-T

Description	Port Count	Applications	MRJ21 Connections (Back)	Footprint	Figure	Non-AMPTRAC	AMPTRAC Enabled
MRJ21 Patch Panels, 1U	24	10/100/1000BASE-T	4	Standard	A	1777029-1	1777029-2
	48	10/100/1000BASE-T	8	Standard	B	1435971-1	1777041-1
		10/100BASE-T	4	Angled	C	1777052-1	1777053-1
		10/100BASE-T	4	Standard		1435965-1	1777042-1

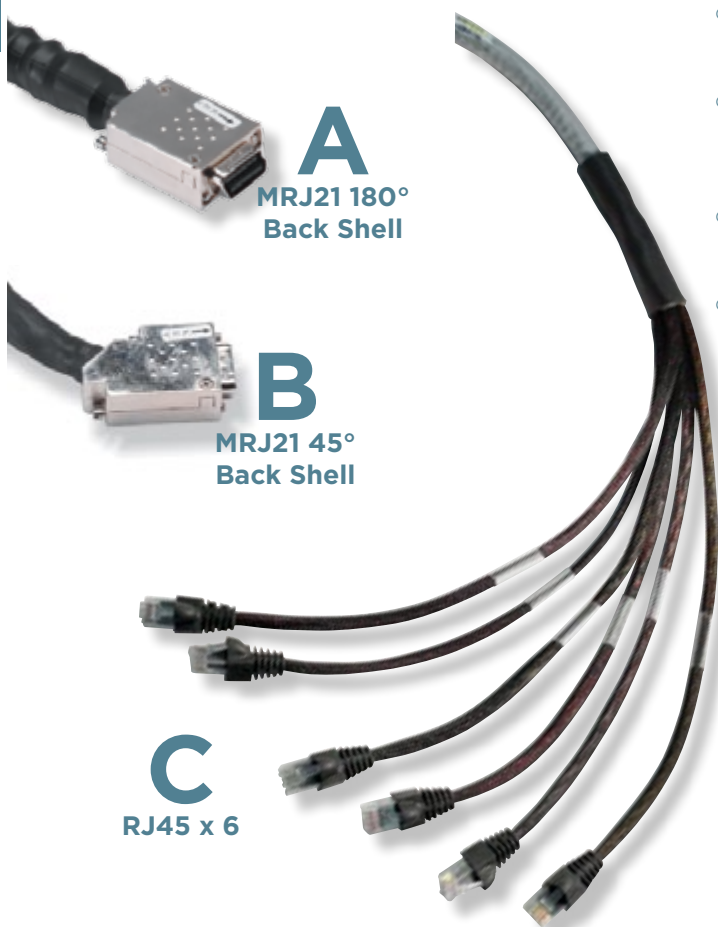
MRJ21 Label Holder Panels and Labels



Description	Footprint	Figure	Part Number	
Label Holder Panel (Labels Sold Separately)	Standard	A	1777040-1	
	Angled		1777054-1	
Label Sheet			Color	5 Sheets/Pack (Labels for 22 Panels)
			White	1375354-1
			Blue	1375354-2
			Green	1375354-3
			Purple	1375354-4
			Red	1375354-5
			Brown	1375354-6
			Yellow	1375354-7
			Orange	1375354-8
			Gray	1375354-9

MRJ21 Cable Assemblies

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A
MRJ21 180°
Back Shell

B
MRJ21 45°
Back Shell

C
RJ45 x 6

- MRJ21 cable assemblies' small foot print reduces cable bulk in pathways and conduits
- Reduced cable bulk allows better air circulation and equipment cooling in data centers
- Approximately 30% less area and 20% less weight than 4-pair cabling
- Dense CHAMP connector style double blade design with offset jackscrews
- Contact layout and footprint for differential pairs creates reduced cross-talk and built in compensation
- 1.5 to 4 times the port density of 2x6 Stacked Modular Jack (RJ45)
- Jackscrews for positive latching and secure cable retention
- Common and additional cable assembly lengths are available - contact your local sales engineer for more information
- 25-Pair, unshielded, 24 AWG conductors
- Enables 25% less power per port than 4-pair connector on active electronics
- Improves uptime and space efficiency on site
- RoHS compliant
- MRJ21 to RJ45 hydra cable assemblies are wired so that all 4 pairs of the RJ45 are active for Gigabit Ethernet
- Most assemblies are available with riser rated (CMR) or plenum rated (CMP) jacketing
- Simple installation – just seat the connector and tighten the two screws
- Factory terminated, tested and serialized

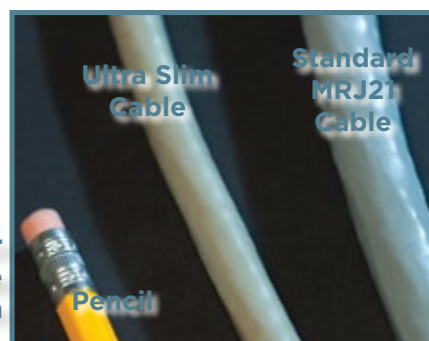
Length m [ft]	End 1 to End 2						
	A to A	A to A	A to B	A to B	A to C	A to C	B to C
	CMR Grey Jacket	CMP Blue Jacket	CMR Grey Jacket	CMP Blue Jacket	CMR Grey Jacket	CMP Blue Jacket	CMR Grey Jacket
1 m [3.28 ft]	1499515-1	1499518-1	1499517-1	1933061-1	1499520-1	1933056-1	1499508-1
2 m [6.56 ft]	1499515-2	1499518-2	1499517-2	1933061-2	1499520-2	1933056-2	1499508-2
3 m [9.84 ft]	1499515-3	1499518-3	1499517-3	1933061-3	1499520-3	1933056-3	1499508-3
4 m [13.12 ft]	1499515-4	1499518-4	1499517-4	1933061-4	1499520-4	1933056-4	1499508-4
5 m [16.40 ft]	1499515-5	1499518-5	1499517-5	1933061-5	1499520-5	1933056-5	1499508-5
6 m [19.68 ft]	1499515-6	1499518-6	1499517-6	1933061-6	1499520-6	1933056-6	1499508-6
7 m [22.97 ft]	1499515-7	1499518-7	1499517-7	1933061-7	1499520-7	1933056-7	1499508-7
8 m [26.25 ft]	1499515-8	1499518-8	1499517-8	1933061-8	1499520-8	1933056-8	1499508-8
9 m [29.53 ft]	1499515-9	1499518-9	1499517-9	1933061-9	1499520-9	1933056-9	1499508-9
10 m [32.81 ft]	1-1499515-0	1-1499518-0	1-1499517-0	1-1933061-0	1-1499520-0	1-1933056-0	1-1499508-0
12 m [39.37 ft]	1-1499515-2	1-1499518-2	1-1499517-2	1-1933061-2	1-1499520-2	1-1933056-2	1-1499508-2
15 m [49.21 ft]	1-1499515-5	1-1499518-5	1-1499517-5	1-1933061-5	1-1499520-5	1-1933056-5	1-1499508-5
17 m [55.77 ft]	1-1499515-7	1-1499518-7	1-1499517-7	1-1933061-7	1-1499520-7	1-1933056-7	1-1499508-7
20 m [65.62 ft]	2-1499515-0	2-1499518-0	2-1499517-0	2-1933061-0	2-1499520-0	2-1933056-0	2-1499508-0
25 m [82.02 ft]	2-1499515-5	2-1499518-5	2-1499517-5	2-1933061-5	2-1499520-5	2-1933056-5	2-1499508-5
30 m [98.42 ft]	3-1499515-0	3-1499518-0	3-1499517-0	3-1933061-0	3-1499520-0	3-1933056-0	3-1499508-0
35 m [114.83 ft]	3-1499515-5	3-1499518-5	3-1499517-5	3-1933061-5	3-1499520-5	3-1933056-5	3-1499508-5
40 m [131.23 ft]	4-1499515-0	4-1499518-0	4-1499517-0	4-1933061-0	4-1499520-0	4-1933056-0	4-1499508-0
50 m [164.04 ft]	5-1499515-0	5-1499518-0	5-1499517-0	5-1933061-0	5-1499520-0	5-1933056-0	5-1499508-0
60 m [196.85 ft]	6-1499515-0	6-1499518-0	6-1499517-0	6-1933061-0	6-1499520-0	6-1933056-0	6-1499508-0
70 m [229.66 ft]	7-1499515-0	7-1499518-0	7-1499517-0	7-1933061-0	7-1499520-0	7-1933056-0	7-1499508-0
80 m [262.47 ft]	8-1499515-0	8-1499518-0	8-1499517-0	8-1933061-0	8-1499520-0	8-1933056-0	8-1499508-0
90 m [295.27 ft]	9-1499515-0	9-1499518-0	9-1499517-0	9-1933061-0	9-1499520-0	9-1933056-0	9-1499508-0

MRJ21 Ultra Slim Cable Assemblies

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0.365 inch [9.2 mm], 24-pair
MRJ21 Ultra Slim Cable Size
Comparison



- Uses same connector and jackscrew design as Standard MRJ21 connectors
- Common and additional cable assembly lengths are available - contact your local sales engineer for more information
- Enables 25% less power per port than 4 pair connector on active electronics
- Improves uptime and space efficiency on site
- 50-60% less cable mass in pathways and spaces than comparable 4-pair cabling
- Improves airflow in cabinets and around active electronics
- 40% less weight than comparable 4-pair cabling
- Gigabit Ethernet Channel performance
- Application length restrictions apply. Consult local SE or ampnetconnect.com for more information
- RoHS compliant

Description	Rating	Jacket Color	Length	Part Number
MRJ21 Ultra Slim, 180° Back Shell	CMR (Riser)	Gray	2 m [6.56 ft]	1933960-2
			3 m [9.84 ft]	1933960-3
			4 m [13.12 ft]	1933960-4
			5 m [16.40 ft]	1933960-5
			6 m [19.68 ft]	1933960-6
			7 m [22.97 ft]	1933960-7
			8 m [26.25 ft]	1933960-8
			9 m [29.53 ft]	1933960-9
			10 m [32.81 ft]	1-1933960-0
			12 m [39.37 ft]	1-1933960-2
			15 m [49.21 ft]	1-1933960-5
			17 m [55.77 ft]	1-1933960-7
			20 m [65.62 ft]	2-1933960-0

Sigma-Link Cat6 UTP Cable Assemblies



- Meets or exceeds component performance requirements of TIA/EIA-568-C.2
- Six bundled 4-pair, solid conductor, riser (CMR) rated, Category 6 UTP cables
- Available in three configurations:
 - Cassette-to-cassette
 - Cassette-to-plug
 - Cassette-to-terminated/open
- Each cassette houses six Category 6 SL Series modular jacks, wired with all 4-pairs active
- Other lengths available, see customer drawing for details

Assembly		Available Lengths									
End A	End B	7 – 25 ft (1 ft Increments)		26 – 64 ft (2 ft Increments)		75 – 95 (10 ft Increments)		105 – 195 (10 ft Increments)		205 – 295 ft (10 ft Increments)	
		7 ft	25 ft	26 ft	64 ft	75 ft	95 ft	105 ft	195 ft	205 ft	295 ft
Cassette	Cassette	2111290-7	2-2111290-5	2-2111290-6	6-2111290-4	7-2111290-5	9-2111290-5	2111291-5	9-2111291-5	2111292-5	9-2111292-5
	Plug	2111300-7	2-2111300-5	2-2111300-6	6-2111300-4	7-2111300-5	9-2111300-5	2111301-5	9-2111301-5	2111302-5	9-2111302-5
	Open	2111310-7	2-2111310-5	2-2111310-6	6-2111310-4	7-2111310-5	9-2111310-5	2111311-5	9-2111311-5	2111312-5	9-2111312-5

NOTE: Use beginning and end lengths and indicated increments to determine dash numbers for part numbers listed above. See customer drawings for a full list of part numbers

Sigma-Link Cat6A F/UTP Cable Assemblies

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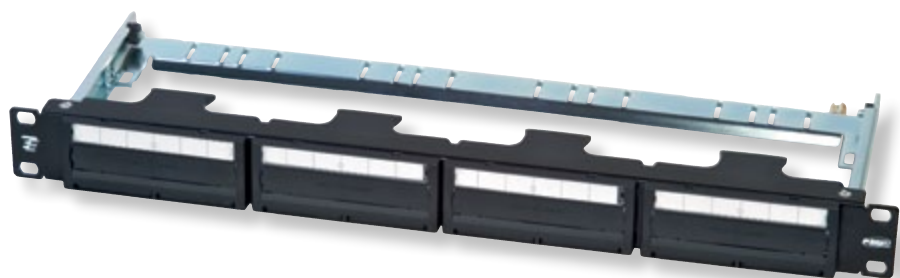


- Meets or exceeds component performance requirements of TIA/EIA-568-C.2
- Six bundled 4-pair, solid conductor, riser (CMR) rated, Category 6A F/UTP cables
- Available in three configurations:
 - Cassette-to-cassette
 - Cassette-to-plug
 - Cassette-to-unterminated/open
- Each cassette houses six Category 6A AMP-TWIST modular jacks, wired with all 4-pairs active
- Other lengths available, see customer drawing for details

Assembly		7 – 25 ft (1 ft Increments)		26 – 64 ft (2 ft Increments)		Available Lengths 75 – 95 ft (10 ft Increments)		105 – 195 ft (10 ft Increments)		205 – 295 ft (10 ft Increments)	
End A	End B	7 ft	25 ft	26 ft	64 ft	75 ft	95 ft	105 ft	195 ft	205 ft	295 ft
Cassette	Cassette	2111250-7	2-2111250-5	2-2111250-6	6-2111250-4	7-2111250-5	9-2111250-5	2111251-5	9-2111251-5	2111252-5	9-2111252-5
	Plug	2111270-7	2-2111270-5	2-2111270-6	6-2111270-4	7-2111270-5	9-2111270-5	2111271-5	9-2111271-5	2111272-5	9-2111272-5
	Open	2111280-7	2-2111280-5	2-2111280-6	6-2111280-4	7-2111280-5	9-2111280-5	2111281-5	9-2111281-5	2111282-5	9-2111282-5

NOTE: Use beginning and end lengths and indicated increments to determine dash numbers for part numbers listed above. See customer drawings for a full list of part numbers

Sigma-Link Patch Panel

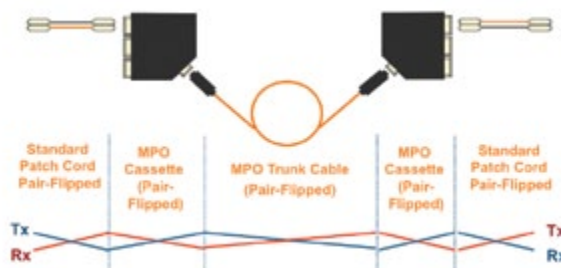


- 19-inch unloaded panel accommodates four Sigma-Link cassettes
- Features integrated cable management bar

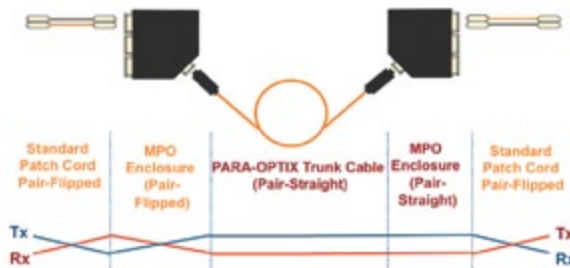
Description	Part Number
AMP Sigma-Link Patch Panel, 1U H, 19 in W, Standard (Flush) Footprint	1-1671215-1

PARA-OPTIX Products

System Polarity with MPO Pair-Flipped AB/BA Trunk Cable



System Polarity with PARA-OPTIX Pair-Straight AB/AB Trunk Cable



PARA-OPTIX Backbone Enclosure Kit



- One of each enclosure is included as required to maintain polarity (see polarity diagram)
- 1U high rack mounted enclosures
- Pre-tested and ready for installation
- Built-in cable management
- High density saves space and installation time
- Each enclosure provides 36 XG OM3 duplex LC ports
- Each enclosure accepts a single 72 fiber PARA-OPTIX MPO-style cable assembly – one connector for all 36 duplex ports
- Use label sheets 1375354 (see Chapter 17)
- Compatible with ground lug kit 556438 (see Chapter 15), rear cable management 556561 (see Chapter 15) and XG OM3 LC duplex cable assemblies (see Chapter 07)

Description	Duplex Fiber Ports	Fiber Count	PARA-OPTIX MPO Connectors on Back	Polarity of Included Enclosures	Part Numbers
PARA-OPTIX Rack Mount Enclosure kit	36	72	1	Pair-Straight (AB/AB) Pair-Flipped (AB/BA)	1919547-1

PARA-OPTIX MPO-style Trunk Cable Assembly



- 72 XG OM3 fibers in a single PARA-OPTIX MPO-style connector
- Assemblies are made from XG OM3 cable with a diameter of approximately 8 mm
- Pulling socks protect PARA-OPTIX connectors during installation
- Factory terminated and tested – shipped ready for installation
- Trunk cable assemblies must be connected between one pair-flipped (AB/BA) and one pair-straight (AB/AB) enclosure (see polarity diagram)

Description	Fiber Type	UL/NEC Rating	Jacket Color	Length	Part Number
72 Fiber Trunk Assembly, Pair-Straight AB/AB	XG OM3	Plenum (OFNP)	Aqua	10 ft [3.05 m]	1919505-1
				20 ft [6.10 m]	1919505-2
				30 ft [9.14 m]	1919505-3
				40 ft [12.19 m]	1919505-4
				50 ft [15.24 m]	1919505-5
				60 ft [18.29 m]	1919505-6
				70 ft [21.34 m]	1919505-7
				80 ft [24.38 m]	1919505-8
				90 ft [27.43 m]	1919505-9
				100 ft [30.48 m]	1-1919505-0
				110 ft [33.53 m]	1-1919505-1
				120 ft [36.58 m]	1-1919505-2
				130 ft [39.62 m]	1-1919505-3
				140 ft [42.67 m]	1-1919505-4
				150 ft [45.72 m]	1-1919505-5
				160 ft [48.77 m]	1-1919505-6
				170 ft [51.82 m]	1-1919505-7
				180 ft [54.86 m]	1-1919505-8
				190 ft [57.91 m]	1-1919505-9
				200 ft [60.96 m]	2-1919505-0
				210 ft [64.00 m]	2-1919505-1
				220 ft [67.06 m]	2-1919505-2
				230 ft [70.10 m]	2-1919505-3
				240 ft [73.15 m]	2-1919505-4
				250 ft [76.20 m]	2-1919505-5
				260 ft [79.25 m]	2-1919505-6
				270 ft [82.30 m]	2-1919505-7
				280 ft [85.34 m]	2-1919505-8
				290 ft [88.39 m]	2-1919505-9
				300 ft [91.44 m]	3-1919505-0

MPO Trunk Cable Assemblies

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MPO Cable Assembly with Pulling Socks

- Trunk cable assemblies fiber polarity is Pair-Flipped AB/BA (see polarity diagram this chapter)
- Trunk cables with Pair-Straight AB/AB polarity are available
- Pulling socks protect MPO connectors during installation
- Twelve (12) fibers per MPO connector
- MPO cable assemblies come pre-tested and ready for installation
- 12 and 24 fiber MPO trunk cable assemblies:
 - Meet or exceed the requirements of GR-409-CORE
 - Are Riser (OFNR) and Plenum (OFNP) rated
 - Plenum cables can be used in riser spaces
 - Custom fiber counts and lengths are available
 - Jacket Color:
 - 62.5 μ m OM1 and 50 μ m OM2 multimode – orange jacket
 - XG OM3, XG OM4 multimode: – aqua jacket
 - Single-mode – yellow jacket

MPO Trunk Cable Assemblies, 12-Fiber, Pair-flipped (AB/BA), Riser/ Plenum (OFNR/OFNP)

Length	62.5 μ m OM1 Multimode	50 μ m OM2 Multimode	XG OM3 Multimode	XG OM4 Multimode	Single-mode
10 ft [3.05 m]	6435024-1	6435028-1	1907404-1	1553444-1	6435070-1
20 ft [6.10 m]	6435024-2	6435028-2	1907404-2	1553444-2	6435070-2
30 ft [9.14 m]	6435024-3	6435028-3	1907404-3	1553444-3	6435070-3
40 ft [12.19 m]	6435024-4	6435028-4	1907404-4	1553444-4	6435070-4
50 ft [15.24 m]	6435024-5	6435028-5	1907404-5	1553444-5	6435070-5
60 ft [18.29 m]	6435024-6	6435028-6	1907404-6	1553444-6	6435070-6
70 ft [21.34 m]	6435024-7	6435028-7	1907404-7	1553444-7	6435070-7
80 ft [24.38 m]	6435024-8	6435028-8	1907404-8	1553444-8	6435070-8
90 ft [27.43 m]	6435024-9	6435028-9	1907404-9	1553444-9	6435070-9
100 ft [30.48 m]	1-6435024-0	1-6435028-0	1-1907404-0	1-1553444-0	1-6435070-0
110 ft [33.53 m]	1-6435024-1	1-6435028-1	1-1907404-1	1-1553444-1	1-6435070-1
120 ft [36.58 m]	1-6435024-2	1-6435028-2	1-1907404-2	1-1553444-2	1-6435070-2
130 ft [39.62 m]	1-6435024-3	1-6435028-3	1-1907404-3	1-1553444-3	1-6435070-3
140 ft [42.67 m]	1-6435024-4	1-6435028-4	1-1907404-4	1-1553444-4	1-6435070-4
150 ft [45.72 m]	1-6435024-5	1-6435028-5	1-1907404-5	1-1553444-5	1-6435070-5
160 ft [48.77 m]	1-6435024-6	1-6435028-6	1-1907404-6	1-1553444-6	1-6435070-6
170 ft [51.82 m]	1-6435024-7	1-6435028-7	1-1907404-7	1-1553444-7	1-6435070-7
180 ft [54.86 m]	1-6435024-8	1-6435028-8	1-1907404-8	1-1553444-8	1-6435070-8
190 ft [57.91 m]	1-6435024-9	1-6435028-9	1-1907404-9	1-1553444-9	1-6435070-9
200 ft [60.96 m]	2-6435024-0	2-6435028-0	2-1907404-0	2-1553444-0	2-6435070-0
210 ft [64.00 m]	2-6435024-1	2-6435028-1	2-1907404-1	2-1553444-1	2-6435070-1
220 ft [67.06 m]	2-6435024-2	2-6435028-2	2-1907404-2	2-1553444-2	2-6435070-2
230 ft [70.10 m]	2-6435024-3	2-6435028-3	2-1907404-3	2-1553444-3	2-6435070-3
240 ft [73.15 m]	2-6435024-4	2-6435028-4	2-1907404-4	2-1553444-4	2-6435070-4
250 ft [76.20 m]	2-6435024-5	2-6435028-5	2-1907404-5	2-1553444-5	2-6435070-5
260 ft [79.25 m]	2-6435024-6	2-6435028-6	2-1907404-6	2-1553444-6	2-6435070-6
270 ft [82.30 m]	2-6435024-7	2-6435028-7	2-1907404-7	2-1553444-7	2-6435070-7
280 ft [85.34 m]	2-6435024-8	2-6435028-8	2-1907404-8	2-1553444-8	2-6435070-8
290 ft [88.39 m]	2-6435024-9	2-6435028-9	2-1907404-9	2-1553444-9	2-6435070-9
300 ft [91.44 m]	3-6435024-0	3-6435028-0	3-1907404-0	3-1553444-0	3-6435070-0

MPO Trunk Cable Assemblies, 24-Fiber, Pair-flipped (AB/BA), Riser/ Plenum (OFNR/OFNP)

Length	62.5 μ m OM1 Multimode	50 μ m OM2 Multimode	XG OM3 Multimode	XG OM4 Multimode	Single-mode
10 ft [3.05 m]	6435025-1	6435029-1	6754687-1	1553445-1	6754882-1
20 ft [6.10 m]	6435025-2	6435029-2	6754687-2	1553445-2	6754882-2
30 ft [9.14 m]	6435025-3	6435029-3	6754687-3	1553445-3	6754882-3
40 ft [12.19 m]	6435025-4	6435029-4	6754687-4	1553445-4	6754882-4
50 ft [15.24 m]	6435025-5	6435029-5	6754687-5	1553445-5	6754882-5
60 ft [18.29 m]	6435025-6	6435029-6	6754687-6	1553445-6	6754882-6
70 ft [21.34 m]	6435025-7	6435029-7	6754687-7	1553445-7	6754882-7
80 ft [24.38 m]	6435025-8	6435029-8	6754687-8	1553445-8	6754882-8

MPO Trunk Cable Assemblies

MPO Trunk Cable Assemblies, 24-Fiber, Pair-flipped (AB/BA), Riser/ Plenum (OFNR/OFNP) – Continued

11

Length	62.5 μ m OM1 Multimode	50 μ m OM2 Multimode	XG OM3 Multimode	XG OM4 Multimode	Single-mode
90 ft [27.43 m]	6435025-9	6435029-9	6754687-9	1553445-9	6754882-9
100 ft [30.48 m]	1-6435025-0	1-6435029-0	1-6754687-0	1-1553445-0	1-6754882-0
110 ft [33.53 m]	1-6435025-1	1-6435029-1	1-6754687-1	1-1553445-1	1-6754882-1
120 ft [36.58 m]	1-6435025-2	1-6435029-2	1-6754687-2	1-1553445-2	1-6754882-2
130 ft [39.62 m]	1-6435025-3	1-6435029-3	1-6754687-3	1-1553445-3	1-6754882-3
140 ft [42.67 m]	1-6435025-4	1-6435029-4	1-6754687-4	1-1553445-4	1-6754882-4
150 ft [45.72 m]	1-6435025-5	1-6435029-5	1-6754687-5	1-1553445-5	1-6754882-5
160 ft [48.77 m]	1-6435025-6	1-6435029-6	1-6754687-6	1-1553445-6	1-6754882-6
170 ft [51.82 m]	1-6435025-7	1-6435029-7	1-6754687-7	1-1553445-7	1-6754882-7
180 ft [54.86 m]	1-6435025-8	1-6435029-8	1-6754687-8	1-1553445-8	1-6754882-8
190 ft [57.91 m]	1-6435025-9	1-6435029-9	1-6754687-9	1-1553445-9	1-6754882-9
200 ft [60.96 m]	2-6435025-0	2-6435029-0	2-6754687-0	2-1553445-0	2-6754882-0
210 ft [64.00 m]	2-6435025-1	2-6435029-1	2-6754687-1	2-1553445-1	2-6754882-1
220 ft [67.06 m]	2-6435025-2	2-6435029-2	2-6754687-2	2-1553445-2	2-6754882-2
230 ft [70.10 m]	2-6435025-3	2-6435029-3	2-6754687-3	2-1553445-3	2-6754882-3
240 ft [73.15 m]	2-6435025-4	2-6435029-4	2-6754687-4	2-1553445-4	2-6754882-4
250 ft [76.20 m]	2-6435025-5	2-6435029-5	2-6754687-5	2-1553445-5	2-6754882-5
260 ft [79.25 m]	2-6435025-6	2-6435029-6	2-6754687-6	2-1553445-6	2-6754882-6
270 ft [82.30 m]	2-6435025-7	2-6435029-7	2-6754687-7	2-1553445-7	2-6754882-7
280 ft [85.34 m]	2-6435025-8	2-6435029-8	2-6754687-8	2-1553445-8	2-6754882-8
290 ft [88.39 m]	2-6435025-9	2-6435029-9	2-6754687-9	2-1553445-9	2-6754882-9
300 ft [91.44 m]	3-6435025-0	3-6435029-0	3-6754687-0	3-1553445-0	3-6754882-0

MPO Trunk Cable Assemblies, 72-Fiber, Pair-flipped (AB/BA)

Length	62.5 μ m OM1 Multimode		50 μ m OM2 Multimode		XG OM3 Multimode
	Plenum (OFNP)	Riser (OFNR)	Plenum (OFNP)	Riser (OFNR)	
10 ft [3.05 m]	6435027-1	6435035-1	6435031-1	6435039-1	1828803-1
20 ft [6.10 m]	6435027-2	6435035-2	6435031-2	6435039-2	1828803-2
30 ft [9.14 m]	6435027-3	6435035-3	6435031-3	6435039-3	1828803-3
40 ft [12.19 m]	6435027-4	6435035-4	6435031-4	6435039-4	1828803-4
50 ft [15.24 m]	6435027-5	6435035-5	6435031-5	6435039-5	1828803-5
60 ft [18.29 m]	6435027-6	6435035-6	6435031-6	6435039-6	1828803-6
70 ft [21.34 m]	6435027-7	6435035-7	6435031-7	6435039-7	1828803-7
80 ft [24.38 m]	6435027-8	6435035-8	6435031-8	6435039-8	1828803-8
90 ft [27.43 m]	6435027-9	6435035-9	6435031-9	6435039-9	1828803-9
100 ft [30.48 m]	1-6435027-0	1-6435035-0	1-6435031-0	1-6435039-0	1-1828803-0
110 ft [33.53 m]	1-6435027-1	1-6435035-1	1-6435031-1	1-6435039-1	1-1828803-1
120 ft [36.58 m]	1-6435027-2	1-6435035-2	1-6435031-2	1-6435039-2	1-1828803-2
130 ft [39.62 m]	1-6435027-3	1-6435035-3	1-6435031-3	1-6435039-3	1-1828803-3
140 ft [42.67 m]	1-6435027-4	1-6435035-4	1-6435031-4	1-6435039-4	1-1828803-4
150 ft [45.72 m]	1-6435027-5	1-6435035-5	1-6435031-5	1-6435039-5	1-1828803-5
160 ft [48.77 m]	1-6435027-6	1-6435035-6	1-6435031-6	1-6435039-6	1-1828803-6
170 ft [51.82 m]	1-6435027-7	1-6435035-7	1-6435031-7	1-6435039-7	1-1828803-7
180 ft [54.86 m]	1-6435027-8	1-6435035-8	1-6435031-8	1-6435039-8	1-1828803-8
190 ft [57.91 m]	1-6435027-9	1-6435035-9	1-6435031-9	1-6435039-9	1-1828803-9
200 ft [60.96 m]	2-6435027-0	2-6435035-0	2-6435031-0	2-6435039-0	2-1828803-0
210 ft [64.00 m]	2-6435027-1	2-6435035-1	2-6435031-1	2-6435039-1	2-1828803-1
220 ft [67.06 m]	2-6435027-2	2-6435035-2	2-6435031-2	2-6435039-2	2-1828803-2
230 ft [70.10 m]	2-6435027-3	2-6435035-3	2-6435031-3	2-6435039-3	2-1828803-3
240 ft [73.15 m]	2-6435027-4	2-6435035-4	2-6435031-4	2-6435039-4	2-1828803-4
250 ft [76.20 m]	2-6435027-5	2-6435035-5	2-6435031-5	2-6435039-5	2-1828803-5
260 ft [79.25 m]	2-6435027-6	2-6435035-6	2-6435031-6	2-6435039-6	2-1828803-6
270 ft [82.30 m]	2-6435027-7	2-6435035-7	2-6435031-7	2-6435039-7	2-1828803-7
280 ft [85.34 m]	2-6435027-8	2-6435035-8	2-6435031-8	2-6435039-8	2-1828803-8
290 ft [88.39 m]	2-6435027-9	2-6435035-9	2-6435031-9	2-6435039-9	2-1828803-9
300 ft [91.44 m]	3-6435027-0	3-6435035-0	3-6435031-0	3-6435039-0	3-1828803-0

MPO Optical Fiber Cassettes

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**LC Duplex, 24-fiber
MPO Cassette**



**LC Duplex, 12-fiber
MPO Cassette**



MT-RJ, 24-fiber MPO Cassette



**SC Duplex, 12-fiber
MPO Cassette**



ST, 12-fiber MPO Cassette

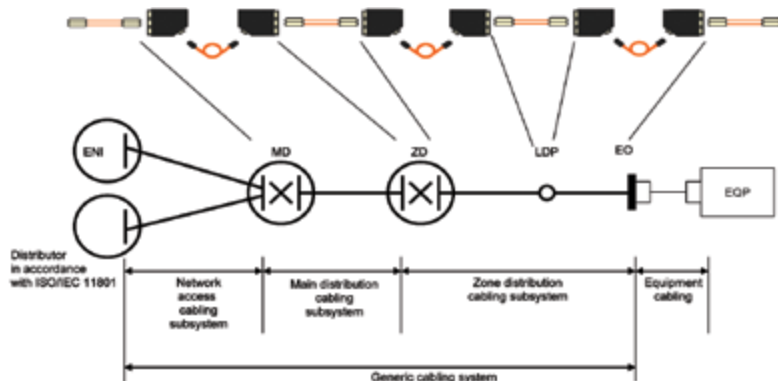
- Cassette fiber polarity is Pair-Flipped (AB/BA)
- Cassettes with polarity Pair-Straight (AB/AB) are available
- Cassettes have one 12-fiber MPO connection, or two 12-fiber MPO connections (for a total of 24-fibers) on the back of each cassette
- Highest density option uses small form factor connectors (MT-RJ or LC)
- Cassettes have same footprint as optical fiber snap-in adapter plates
- Cassettes mount in all AMP NETCONNECT enclosures that accept snap-in adapter plates
- Factory terminated and tested to be ready for installation
- For a complete list of fiber enclosures see Chapter 15

Description	Fiber Type	Adapter Color	Duplex Port Count [Fiber Count]	
			6 [12]	12 [24]
LC Duplex	62.5 μ m OM1 Multimode	Beige	1918781-1	1918782-1
	50/125 OM2 Multimode	Black	1918779-1	1918780-1
	XG OM3 Multimode	Aqua	1918783-1	1918784-1
	XG OM4 Multimode	Aqua	1553448-1	1553449-1
	Single-mode	Blue	1938056-1	1918786-1
MT-RJ	62.5 μ m OM1 Multimode	Beige	6754285-1	6754287-1
	50/125 OM2 Multimode	Black	6754286-1	6754288-1
	XG OM3 Multimode	Aqua	1918777-1	1918778-1
	Single-mode	Blue	1938996-1	6828819-1
SC Duplex	62.5/125 OM1	Black	6435180-2	—
	50/125 OM2	Black	6435181-2	—
	50/125 XG OM3	Aqua	6754333-2	—
	50/125 XG OM4	Aqua	1553450-1	—
	Single-mode	Blue	6435069-2	—
ST	50/125 OM2	Black	6435067-2	—
	62.5/125 OM1	Black	6278418-2	—

MPOptimate Products

Our MPOptimate cabling system supports 10Gbps data center applications, as specified in ISO/IEC 24764, EN 50173-5 and TIA/EIA 942. MPOptimate systems offer one passive channel from equipment to switch with no need to signal repeat or amplify. Plus, you can replace aggregation switches by a patch cord without changing passive network components.

MPOptimate cabling systems allow network traffic in your data center to travel from connector tip to connector tip, which makes it easier to upgrade your network switch technology without re-configuring your cabling system. The MPOptimate optical fiber system is engineered to minimize the disturbance in fiber optical connections in passive cabling channels. In other words, MPOptimate components reduce attenuation and mitigate core misalignments, physical contact errors, and help boost transmission rates.



- Up to 6 cassettes per link for 10 Gbps
- Full 300 meter support on OM3 fibers
- Factory terminated and tested
- High density, up to 72 ports in 1U
- Maximum Cassette Insertion Loss: < 0.35dB
- Minimum Return Loss:
 - MPO > 28dB
 - LC/SC > 35dB
- All connectors meet IEC 61755-3 series end face geometry
- For a complete list of fiber enclosures see Chapter 15

MPOptimate Cassettes

LC Duplex, 12-Fiber



LC Duplex, 24-Fiber



Description	Front Connectors	Fiber Count	Duplex Port Count	Fiber Polarity	
				Straight (AB/AB)	Pair-Flipped (AB/BA)
MPOptimate Cassettes	LC Duplex	12	6	1920753-1	1-1920753-1
		24	12	1920698-1	1-1920698-1
	SC Duplex	12	6	2055107-1	1-2055107-1

MPOptimate Cable Assemblies

SC Duplex



LC Duplex



MPO

- Other lengths available, please refer to the customer drawing for details

Connectors	Fiber Count	Fiber Polarity	Length					
			1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	10 m [32.80 ft]	20 m [65.62 ft]
MPO	12	Pair-Flipped (AB/BA)	1553287-1	1553287-2	1553287-3	1553287-5	1-1553287-0	2-1553287-0
			10 ft [3.05 m]	20 ft [6.10 m]	50 ft [15.24 m]	100 ft [30.48 m]	200 ft [60.96 m]	300 ft [91.44 m]
		Straight (AB/AB)	1907880-1	1907880-2	1907880-5	1-1907880-0	2-1907880-0	3-1907880-0
			1907882-1	1907882-2	1907882-5	1-1907882-0	2-1907882-0	3-1907882-0
	24	Straight (AB/AB)	1907881-1	1907881-2	1907881-5	1-1907881-0	2-1907881-0	3-1907881-0
			1907883-1	1907883-2	1907883-5	1-1907883-0	2-1907883-0	3-1907883-0
		Pair-Flipped (AB/BA)	1907881-1	1907881-2	1907881-5	1-1907881-0	2-1907881-0	3-1907881-0
			1907883-1	1907883-2	1907883-5	1-1907883-0	2-1907883-0	3-1907883-0

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<http://www.ampnetconnect.com>





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LC SECURE LightCrimp Plus Simplex Connectors (No-epoxy/No-polish).....	02
LC SECURE Epoxy/Polish Simplex Connectors	02
LC Duplex Clips.....	02
LC SECURE SL Series Duplex Couplers.....	03
LC SECURE Snap-in Adapter Plates	03
LC SECURE MPO Optical Fiber Cassettes	03
LC SECURE Duplex Hybrid Cable Assemblies.....	04 – 05
MT-RJ SECURE Outlet Jacks	06
MT-RJ SECURE Single-mode Pigtail Jacks.....	07
MT-RJ SECURE Hybrid Cable Assemblies.....	07 – 08
MPO SECURE Optical Fiber Cassettes	09
MPO SECURE Trunk Cable Assemblies, Plenum (OFNP).....	10
RJ45 SECURE SL Series Category 6 Modular Jacks.....	11
RJ45 SECURE Category 6 Modular Plugs.....	11
RJ45 SECURE Category 6 Patch Cable Assemblies.....	12
Security Key Plug	13
Security Key Jack.....	13
Security Key Patch Cord	14

LC SECURE LightCrimp Plus Simplex Connectors (No-epoxy/No-polish)

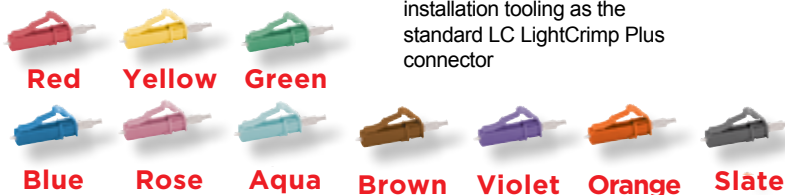
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- Ten color-coded keyed designs limit improper connections in segregated networks
- LC SECURE connectors only mate with LC SECURE adapters of the same color
- LC SECURE LightCrimp Plus connectors feature ceramic ferrules

- Select appropriate part number for termination to:
 - 900 μ m tight-buffered or 250 μ m coated fibers
 - 1.6 – 2.0mm jacketed fiber

- Easy installation:
 - No epoxy, no polishing
 - No bench tool required
 - Strip, cleave, and crimp
- LC SECURE LightCrimp Plus connector uses the same installation tooling as the standard LC LightCrimp Plus connector

- LC Duplex clip (black, sold separately) links two simplex LC connectors to make one duplex LC connector and allows for polarity correction after termination



Fiber Type	Boot Color	900 μ m Tight-buffered	250 μ m Coated	1.6 – 2.0 mm Jacketed	Red	Yellow	Green	Blue	Rose	Aqua	Brown	Violet	Orange	Slate
50 μ m OM2	Black	x	x	x	1985959-1	1985959-2	1985959-3	1985959-4	1985959-5	1985959-6	1985959-7	1985959-8	1985959-9	1-1985959-0
XG OM3/OM4 50 μ m	Aqua	x	x	x	1985960-1	1985960-2	1985960-3	1985960-4	1985960-5	1985960-6	1985960-7	1985960-8	1985960-9	1-1985960-0
62.5 μ m OM1	Beige	x	x	x	1985961-1	1985961-2	1985961-3	1985961-4	1985961-5	1985961-6	1985961-7	1985961-8	1985961-9	1-1985961-0
Single-mode	Blue	x	x		1828856-1	1828856-2	1828856-3	1828856-4	1828856-5	1828856-6	1828856-7	1828856-8	1828856-9	1-1828856-0
			x		1828860-1	1828860-2	1828860-3	1828860-4	1828860-5	1828860-6	1828860-7	1828860-8	1828860-9	1-1828860-0

Note: Table colors are for reference only.

LC SECURE Epoxy/Polish Simplex Connectors



- Ten color-coded keyed designs limit improper connections in segregated networks
- LC SECURE connectors only mate with LC SECURE adapters of the same color
- Duplex clip (black, sold separately) attaches two simplex connectors into duplex form and allows for polarity correction after termination

- Two LC SECURE connector kits for each fiber type (multimode and single-mode)
- One terminates either one 250 μ m coated fiber or one 900 μ m tight-buffered fiber
- One terminates one 1.6mm to 2.0mm jacketed fiber
- Multimode connectors are suitable for use with 50/125 μ m, XG OM3/OM4 50/125 μ m, and 62.5/125 μ m fibers and come with beige boots

- Single-mode connectors are suitable for use with all single-mode fiber types and come with blue boots
- LC SECURE connectors uses the same LC installation tooling as standard LC
- Suitable for use with heat-cured or anaerobic (quick cure) adhesives

Fiber Type	For Use with	Red	Yellow	Green	Blue	Rose	Aqua	Brown	Violet	Orange	Slate
Multimode	1.6 – 2.0mm Jacketed Fiber	1828078-1	1828078-2	1828078-3	1828078-4	1828078-5	1828078-6	1828078-7	1828078-8	1828078-9	1-1828078-0
	900 μ m Tight-buffered or 250 μ m Coated Fibers	1828861-1	1828861-2	1828861-3	1828861-4	1828861-5	1828861-6	1828861-7	1828861-8	1828861-9	1-1828861-0
Single-mode	1.6 – 2.0mm Jacketed Fiber	1828079-1	1828079-2	1828079-3	1828079-4	1828079-5	1828079-6	1828079-7	1828079-8	1828079-9	1-1828079-0
	900 μ m Tight-buffered or 250 μ m Coated Fibers	1828862-1	1828862-2	1828862-3	1828862-4	1828862-5	1828862-6	1828862-7	1828862-8	1828862-9	1-1828862-0

Note: Table colors are for reference only.

LC Duplex Clips



- Used to link two simplex LC connectors to make one duplex LC connector

- Compatible with single-mode or multimode simplex connectors

- Available colors: black
- Available in packages of six (6)

Description	Package Quantity	Part Number
LC Duplex Clips	6	1754371-2

LC SECURE SL Series Duplex Couplers



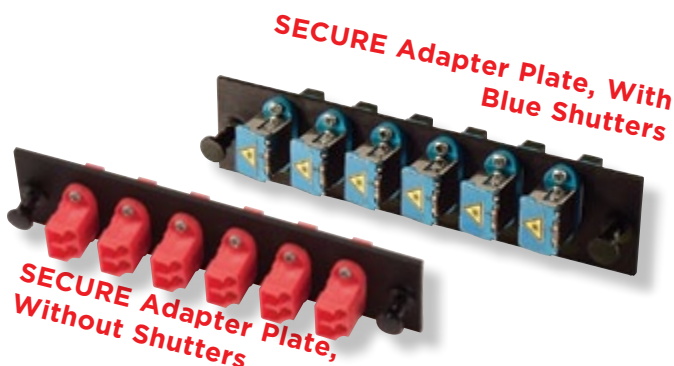
- Ten color-coded keyed designs limit improper connections in segregated networks
- LC SECURE connectors only mate with LC SECURE couplers of the same color
- Hybrid Coupler – mates LC SECURE connectors to standard connectors
- LC SECURE coupler on the Work Area side
- Couplers suitable for use with multimode and single-mode LC SECURE connectors
- Easily snaps into SL Series modules, duplex mounting straps, patch panels, and enclosures
- May be used in straight or angled faceplate modules
- Configure faceplates with one or more LC SECURE connectors to provide a common access point to multiple segregated or secured networks

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Description	Fiber Type	Red	Yellow	Green	Blue	Rose	Aqua	Brown	Violet	Orange	Slate
LC SECURE Coupler	Multimode and Single-mode	1933422-1	1933422-2	1933422-3	1933422-4	1933422-5	1933422-6	1933422-7	1933422-8	1933422-9	1-1933422-0
LC SECURE Hybrid Coupler	Multimode and Single-mode	1933285-1	1933285-2	1933285-3	1933285-4	1933285-5	1933285-6	1933285-7	1933285-8	1933285-9	1-1933285-0

Note: Table colors are for reference only.

LC SECURE Snap-in Adapter Plates



- Ten color-coded keyed designs limit improper connections in segregated networks
- LC SECURE connectors only mate with LC SECURE adapters of the same color
- Package quantity: 1 plate per pack
- Adapters suitable for use with multimode or single-mode LC SECURE connectors
- Snap-in Adapter Plates fit in unloaded optical fiber enclosures listed in Chapter 15
- Snap-in adapter plates are pre-loaded with either six (6) or twelve (12) duplex LC SECURE adapters
- Adapter plates with Shutters contain a spring loaded cover to protect connectors from fine particulates

Fiber Type	Fiber Count	Duplex Port Count	Shutters	Red	Yellow	Green	Blue	Rose	Aqua	Brown	Violet	Orange	Slate
Multimode or Single-mode	12	6	Without	1777127-1	1777127-2	1777127-3	1777127-4	1777127-9	1-1777127-0	1777127-6	1777127-8	1777127-5	1777127-7
			With Blue	1777265-1	1777265-2	1777265-3	1777265-4	1777265-9	1-1777265-0	1777265-6	1777265-8	1777265-5	1777265-7
			With Aqua	1777266-1	1777266-2	1777266-3	1777266-4	1777266-9	1-1777266-0	1777266-6	1777266-8	1777266-5	1777266-7
			Without	1499702-2	1499703-2	1499704-2	1499705-2	1499706-2	1499707-2	1499708-2	1499709-2	1499710-2	1499711-2

Note: Table colors are for reference only.

LC SECURE MPO Optical Fiber Cassettes



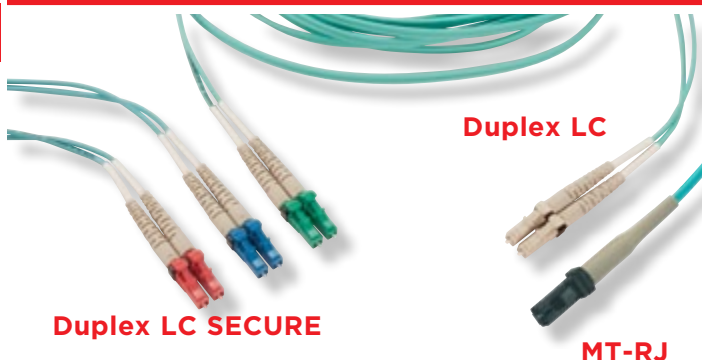
- Ten color-coded keyed designs limit improper connections in segregated networks
- Cassettes have one MPO connection (12-fiber) or two MPO connections (24-fiber) on the back
- Cassettes house one or two 12-fiber break-out assemblies
- Cassette fiber polarity is Pair-Flipped (AB/BA)
- Cassettes with Pair-Straight polarity (AB/AB) are available - call for details
- Cassettes have same footprint as the snap-in adapter plates and fit in unloaded optical fiber enclosures listed in Chapter 15
- Factory tested and ready for installation
- Use standard MPO trunk cable assemblies

Fiber Type	Fiber Count	Duplex Port Count	Red	Yellow	Green	Blue	Rose	Aqua	Brown	Violet	Orange	Slate
62.5 µm OM1	12	6	1985799-2	1985799-5	1985799-3	1985799-4	1985799-9	1-1985799-1	1985799-7	1985799-8	1985799-6	1-1985799-0
	24	12	1938967-2	1938967-5	1938967-3	1938967-4	1938967-9	1-1938967-1	1938967-7	1938967-8	1938967-6	1-1938967-0
50 µm OM2	12	6	1985798-2	1985798-5	1985798-3	1985798-4	1985798-9	1-1985798-1	1985798-7	1985798-8	1985798-6	1-1985798-0
	24	12	1938966-2	1938966-5	1938966-3	1938966-4	1938966-9	1-1938966-1	1938966-7	1938966-8	1938966-6	1-1938966-0
XG OM3 50 µm	12	6	1985713-2	1985713-5	1985713-3	1985713-4	1985713-9	1-1985713-1	1985713-7	1985713-8	1985713-6	1-1985713-0
	24	12	1918785-2	1918785-5	1918785-3	1918785-4	1918785-9	1-1918785-1	1918785-7	1918785-8	1918785-6	1-1918785-0
Single-mode	12	6	1985797-2	1985797-5	1985797-3	1985797-4	1985797-9	1-1985797-1	1985797-7	1985797-8	1985797-6	1-1985797-0
	24	12	1918786-2	1918786-5	1918786-3	1918786-4	1918786-9	1-1918786-1	1918786-7	1918786-8	1918786-6	1-1918786-0

Note: Table colors are for reference only.

LC SECURE Duplex Hybrid Cable Assemblies

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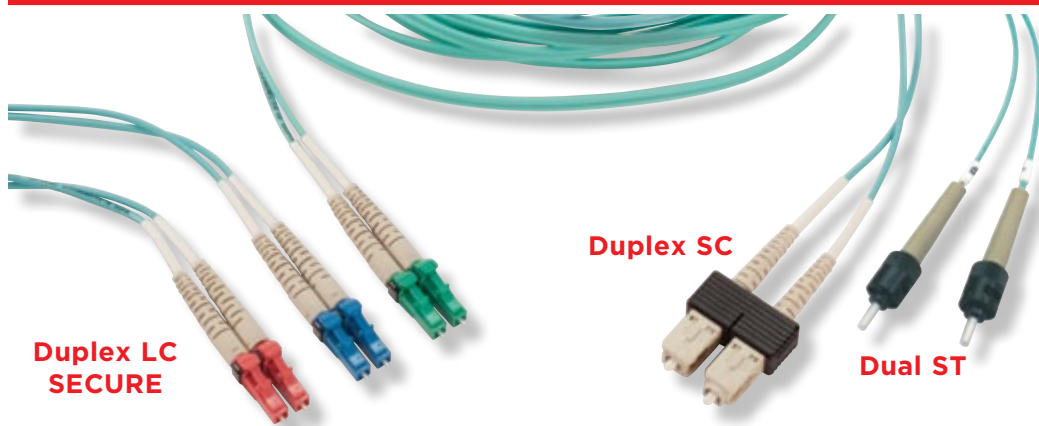
- Assemblies have SECURE connector on one end and a standard connector on the other end for connecting to equipment
- Other constructions and combinations are available - call for details
- Ten color-coded keyed designs limit improper connections in segregated networks
- LC SECURE plugs only mate with LC SECURE adapters of the same color
- Quick Ship available
- LC SECURE connectors feature ceramic ferrules
- Standard jacket color is yellow for single-mode, orange for 50/125 μm and 62.5/125 μm , and aqua for XG 50/125 μm
- Cable assemblies are riser-rated (Other ratings are available - call for details)
- The most common lengths are listed - more lengths are available, consult customer drawings for more

SECURE Color	Fiber Type	Duplex LC SECURE to Duplex LC					Duplex LC SECURE to MT-RJ				
		1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	10 m [32.81 ft]	1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	10 m [32.81 ft]
Red	62.5 μm OM1	1906051-1	1906051-2	1906051-3	1906051-5	1-1906051-0	1907124-1	1907124-2	1907124-3	1907124-5	1-1907124-0
	50 μm OM2	1906012-1	1906012-2	1906012-3	1906012-5	1-1906012-0	1907114-1	1907114-2	1907114-3	1907114-5	1-1907114-0
	XG OM3 50 μm	1906090-1	1906090-2	1906090-3	1906090-5	1-1906090-0	1907134-1	1907134-2	1907134-3	1907134-5	1-1907134-0
	Single-mode	1905109-1	1905109-2	1905109-3	1905109-5	1-1905109-0	1906904-1	1906904-2	1906904-3	1906904-5	1-1906904-0
Yellow	62.5 μm OM1	1906053-1	1906053-2	1906053-3	1906053-5	1-1906053-0	1907126-1	1907126-2	1907126-3	1907126-5	1-1907126-0
	50 μm OM2	1906014-1	1906014-2	1906014-3	1906014-5	1-1906014-0	1907116-1	1907116-2	1907116-3	1907116-5	1-1907116-0
	XG OM3 50 μm	1906092-1	1906092-2	1906092-3	1906092-5	1-1906092-0	1907136-1	1907136-2	1907136-3	1907136-5	1-1907136-0
	Single-mode	1905111-1	1905111-2	1905111-3	1905111-5	1-1905111-0	1906906-1	1906906-2	1906906-3	1906906-5	1-1906906-0
Green	62.5 μm OM1	1906054-1	1906054-2	1906054-3	1906054-5	1-1906054-0	1907127-1	1907127-2	1907127-3	1907127-5	1-1907127-0
	50 μm OM2	1906015-1	1906015-2	1906015-3	1906015-5	1-1906015-0	1907117-1	1907117-2	1907117-3	1907117-5	1-1907117-0
	XG OM3 50 μm	1906093-1	1906093-2	1906093-3	1906093-5	1-1906093-0	1907137-1	1907137-2	1907137-3	1907137-5	1-1907137-0
	Single-mode	1905112-1	1905112-2	1905112-3	1905112-5	1-1905112-0	1906907-1	1906907-2	1906907-3	1906907-5	1-1906907-0
Blue	62.5 μm OM1	1906052-1	1906052-2	1906052-3	1906052-5	1-1906052-0	1907125-1	1907125-2	1907125-3	1907125-5	1-1907125-0
	50 μm OM2	1906013-1	1906013-2	1906013-3	1906013-5	1-1906013-0	1907115-1	1907115-2	1907115-3	1907115-5	1-1907115-0
	XG OM3 50 μm	1906091-1	1906091-2	1906091-3	1906091-5	1-1906091-0	1907135-1	1907135-2	1907135-3	1907135-5	1-1907135-0
	Single-mode	1905110-1	1905110-2	1905110-3	1905110-5	1-1905110-0	1906905-1	1906905-2	1906905-3	1906905-5	1-1906905-0
Rose	62.5 μm OM1	1906056-1	1906056-2	1906056-3	1906056-5	1-1906056-0	1907129-1	1907129-2	1907129-3	1907129-5	1-1907129-0
	50 μm OM2	1906017-1	1906017-2	1906017-3	1906017-5	1-1906017-0	1907119-1	1907119-2	1907119-3	1907119-5	1-1907119-0
	XG OM3 50 μm	1906095-1	1906095-2	1906095-3	1906095-5	1-1906095-0	1907139-1	1907139-2	1907139-3	1907139-5	1-1907139-0
	Single-mode	1905114-1	1905114-2	1905114-3	1905114-5	1-1905114-0	1906909-1	1906909-2	1906909-3	1906909-5	1-1906909-0
Aqua	62.5 μm OM1	1906059-1	1906059-2	1906059-3	1906059-5	1-1906059-0	1907132-1	1907132-2	1907132-3	1907132-5	1-1907132-0
	50 μm OM2	1906020-1	1906020-2	1906020-3	1906020-5	1-1906020-0	1907122-1	1907122-2	1907122-3	1907122-5	1-1907122-0
	XG OM3 50 μm	1906098-1	1906098-2	1906098-3	1906098-5	1-1906098-0	1907142-1	1907142-2	1907142-3	1907142-5	1-1907142-0
	Single-mode	1905117-1	1905117-2	1905117-3	1905117-5	1-1905117-0	1906912-1	1906912-2	1906912-3	1906912-5	1-1906912-0
Brown	62.5 μm OM1	1906058-1	1906058-2	1906058-3	1906058-5	1-1906058-0	1907131-1	1907131-2	1907131-3	1907131-5	1-1907131-0
	50 μm OM2	1906019-1	1906019-2	1906019-3	1906019-5	1-1906019-0	1907121-1	1907121-2	1907121-3	1907121-5	1-1907121-0
	XG OM3 50 μm	1906097-1	1906097-2	1906097-3	1906097-5	1-1906097-0	1907141-1	1907141-2	1907141-3	1907141-5	1-1907141-0
	Single-mode	1905116-1	1905116-2	1905116-3	1905116-5	1-1905116-0	1906911-1	1906911-2	1906911-3	1906911-5	1-1906911-0
Violet	62.5 μm OM1	1906057-1	1906057-2	1906057-3	1906057-5	1-1906057-0	1907130-1	1907130-2	1907130-3	1907130-5	1-1907130-0
	50 μm OM2	1906018-1	1906018-2	1906018-3	1906018-5	1-1906018-0	1907120-1	1907120-2	1907120-3	1907120-5	1-1907120-0
	XG OM3 50 μm	1906096-1	1906096-2	1906096-3	1906096-5	1-1906096-0	1907140-1	1907140-2	1907140-3	1907140-5	1-1907140-0
	Single-mode	1905115-1	1905115-2	1905115-3	1905115-5	1-1905115-0	1906910-1	1906910-2	1906910-3	1906910-5	1-1906910-0
Orange	62.5 μm OM1	1906055-1	1906055-2	1906055-3	1906055-5	1-1906055-0	1907128-1	1907128-2	1907128-3	1907128-5	1-1907128-0
	50 μm OM2	1906016-1	1906016-2	1906016-3	1906016-5	1-1906016-0	1907118-1	1907118-2	1907118-3	1907118-5	1-1907118-0
	XG OM3 50 μm	1906094-1	1906094-2	1906094-3	1906094-5	1-1906094-0	1907138-1	1907138-2	1907138-3	1907138-5	1-1907138-0
	Single-mode	1905113-1	1905113-2	1905113-3	1905113-5	1-1905113-0	1906908-1	1906908-2	1906908-3	1906908-5	1-1906908-0
Slate	62.5 μm OM1	1906060-1	1906060-2	1906060-3	1906060-5	1-1906060-0	1907133-1	1907133-2	1907133-3	1907133-5	1-1907133-0
	50 μm OM2	1906021-1	1906021-2	1906021-3	1906021-5	1-1906021-0	1907123-1	1907123-2	1907123-3	1907123-5	1-1907123-0
	XG OM3 50 μm	1906099-1	1906099-2	1906099-3	1906099-5	1-1906099-0	1907143-1	1907143-2	1907143-3	1907143-5	1-1907143-0
	Single-mode	1905118-1	1905118-2	1905118-3	1905118-5	1-1905118-0	1906913-5	1906913-2	1906913-3	1906913-5	1-5906913-0

Note: Table colors are for reference only.

LC SECURE Duplex Hybrid Cable Assemblies

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SECURE Color	Fiber Type	Duplex LC SECURE to Duplex SC					Duplex LC SECURE to Dual ST				
		1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	10 m [32.81 ft]	1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	10 m [32.81 ft]
Red	62.5 µm OM1	1828872-1	1828872-2	1828872-3	1828872-5	1-1828872-0	1906080-1	1906080-2	1906080-3	1906080-5	1-1906080-0
	50 µm OM2	1905992-1	1905992-2	1905992-3	1905992-5	1-1905992-0	1906002-1	1906002-2	1906002-3	1906002-5	1-1906002-0
	XG OM3 50 µm	1906070-1	1906070-2	1906070-3	1906070-5	1-1906070-0	1905079-1	1905079-2	1905079-3	1905079-5	1-1905079-0
	Single-mode	1905089-1	1905089-2	1905089-3	1905089-5	1-1905089-0	1905099-1	1905099-2	1905099-3	1905099-5	1-1905099-0
Yellow	62.5 µm OM1	1828871-1	1828871-2	1828871-3	1828871-5	1-1828871-0	1906043-1	1906043-2	1906043-3	1906043-5	1-1906043-0
	50 µm OM2	1905994-1	1905994-2	1905994-3	1905994-5	1-1905994-0	1906004-1	1906004-2	1906004-3	1906004-5	1-1906004-0
	XG OM3 50 µm	1906072-1	1906072-2	1906072-3	1906072-5	1-1906072-0	1906082-1	1906082-2	1906082-3	1906082-5	1-1906082-0
	Single-mode	1905091-1	1905091-2	1905091-3	1905091-5	1-1905091-0	1905101-1	1905101-2	1905101-3	1905101-5	1-1905101-0
Green	62.5 µm OM1	1828870-1	1828870-2	1828870-3	1828870-5	1-1828870-0	1906044-1	1906044-2	1906044-3	1906044-5	1-1906044-0
	50 µm OM2	1905995-1	1905995-2	1905995-3	1905995-5	1-1905995-0	1906005-1	1906005-2	1906005-3	1906005-5	1-1906005-0
	XG OM3 50 µm	1906073-1	1906073-2	1906073-3	1906073-5	1-1906073-0	1906083-1	1906083-2	1906083-3	1906083-5	1-1906083-0
	Single-mode	1905092-1	1905092-2	1905092-3	1905092-5	1-1905092-0	1905102-1	1905102-2	1905102-3	1905102-5	1-1905102-0
Blue	62.5 µm OM1	1828875-1	1828875-2	1828875-3	1828875-5	1-1828875-0	1906042-1	1906042-2	1906042-3	1906042-5	1-1906042-0
	50 µm OM2	1905993-1	1905993-2	1905993-3	1905993-5	1-1905993-0	1906003-1	1906003-2	1906003-3	1906003-5	1-1906003-0
	XG OM3 50 µm	1906071-1	1906071-2	1906071-3	1906071-5	1-1906071-0	1906081-1	1906081-2	1906081-3	1906081-5	1-1906081-0
	Single-mode	1905090-1	1905090-2	1905090-3	1905090-5	1-1905090-0	1905100-1	1905100-2	1905100-3	1905100-5	1-1905100-0
Rose	62.5 µm OM1	1906036-1	1906036-2	1906036-3	1906036-5	1-1906036-0	1906046-1	1906046-2	1906046-3	1906046-5	1-1906046-0
	50 µm OM2	1905997-1	1905997-2	1905997-3	1905997-5	1-1905997-0	1906007-1	1906007-2	1906007-3	1906007-5	1-1906007-0
	XG OM3 50 µm	1906075-1	1906075-2	1906075-3	1906075-5	1-1906075-0	1906085-1	1906085-2	1906085-3	1906085-5	1-1906085-0
	Single-mode	1905094-1	1905094-2	1905094-3	1905094-5	1-1905094-0	1905104-1	1905104-2	1905104-3	1905104-5	1-1905104-0
Aqua	62.5 µm OM1	1906039-1	1906039-2	1906039-3	1906039-5	1-1906039-0	1906049-1	1906049-2	1906049-3	1906049-5	1-1906049-0
	50 µm OM2	1906000-1	1906000-2	1906000-3	1906000-5	1-1906000-0	1906010-1	1906010-2	1906010-3	1906010-5	1-1906010-0
	XG OM3 50 µm	1906078-1	1906078-2	1906078-3	1906078-5	1-1906078-0	1906088-1	1906088-2	1906088-3	1906088-5	1-1906088-0
	Single-mode	1905097-1	1905097-2	1905097-3	1905097-5	1-1905097-0	1905107-1	1905107-2	1905107-3	1905107-5	1-1905107-0
Brown	62.5 µm OM1	1906038-1	1906038-2	1906038-3	1906038-5	1-1906038-0	1906048-1	1906048-2	1906048-3	1906048-5	1-1906048-0
	50 µm OM2	1906999-1	1906999-2	1906999-3	1906999-5	1-1906999-0	1906009-1	1906009-2	1906009-3	1906009-5	1-1906009-0
	XG OM3 50 µm	1906077-1	1906077-2	1906077-3	1906077-5	1-1906077-0	1906087-1	1906087-2	1906087-3	1906087-5	1-1906087-0
	Single-mode	1905096-1	1905096-2	1905096-3	1905096-5	1-1905096-0	1905106-1	1905106-2	1905106-3	1905106-5	1-1905106-0
Violet	62.5 µm OM1	1906037-1	1906037-2	1906037-3	1906037-5	1-1906037-0	1906047-1	1906047-2	1906047-3	1906047-5	1-1906047-0
	50 µm OM2	1905998-1	1905998-2	1905998-3	1905998-5	1-1905998-0	1906008-1	1906008-2	1906008-3	1906008-5	1-1906008-0
	XG OM3 50 µm	1906076-1	1906076-2	1906076-3	1906076-5	1-1906076-0	1906086-1	1906086-2	1906086-3	1906086-5	1-1906086-0
	Single-mode	1905095-1	1905095-2	1905095-3	1905095-5	1-1905095-0	1905105-1	1905105-2	1905105-3	1905105-5	1-1905105-0
Orange	62.5 µm OM1	1906035-1	1906035-2	1906035-3	1906035-5	1-1906035-0	1906045-1	1906045-2	1906045-3	1906045-5	1-1906045-0
	50 µm OM2	1906996-1	1906996-2	1906996-3	1906996-5	1-1906996-0	1906006-1	1906006-2	1906006-3	1906006-5	1-1906006-0
	XG OM3 50 µm	1906074-1	1906074-2	1906074-3	1906074-5	1-1906074-0	1906084-1	1906084-2	1906084-3	1906084-5	1-1906084-0
	Single-mode	1905093-1	1905093-2	1905093-3	1905093-5	1-1905093-0	1905103-1	1905103-2	1905103-3	1905103-5	1-1905103-0
Slate	62.5 µm OM1	1906040-1	1906040-2	1906040-3	1906040-5	1-1906040-0	1906050-1	1906050-2	1906050-3	1906050-5	1-1906050-0
	50 µm OM2	1906001-1	1906001-2	1906001-3	1906001-5	1-1906001-0	1906011-1	1906011-2	1906011-3	1906011-5	1-1906011-0
	XG OM3 50 µm	1906079-1	1906079-2	1906079-3	1906079-5	1-1906079-0	1906089-1	1906089-2	1906089-3	1906089-5	1-1906089-0
	Single-mode	1905098-1	1905098-2	1905098-3	1905098-5	1-1905098-0	1905108-1	1905108-2	1905108-3	1905108-5	1-1905108-0

Note: Table colors are for reference only.

MT-RJ SECURE Outlet Jacks

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- Ten color-coded keyed designs limit improper connections in segregated networks
- MT-RJ SECURE plugs only mate with MT-RJ SECURE jacks of the same color
- Match cable fiber type to jack fiber type for correct part number
- MT-RJ optical fiber jacks terminate two fibers per jack
- Jack design eliminates need for MT-RJ SECURE adapter
- Small form factor design is half the size of SC duplex
- No epoxy, no polishing, no crimping
- Can be re-terminated - improves yield
- Each fiber is tunable and locked separately
- No bench tool required
- Shares the same installation tools and procedures as standard MT-RJ jacks
- MT-RJ SECURE outlet jacks are for use with 900 μ m tight-buffered fibers
- Each MT-RJ SECURE outlet jack part number includes:
 - One (1) MT-RJ SECURE outlet jack
 - Actuation tool
 - SL Series housing in matching color
 - Bend-limiting boot (black)
- MT-RJ SECURE patch panel jacks are for use with 900 μ m tight-buffered fibers or 250 μ m coated fibers (select appropriate part number)
- MT-RJ SECURE patch panel jack part number includes:
 - Six (6) MT-RJ SECURE patch panel jacks
 - Two (2) actuation tools
 - fiber guide
 - icon wheel
- Six patch panel jacks fit in one MT-RJ Snap-in Adapter Plate (sold separately)
- SL Series housings and bend-limiting boots sold separately
- MT-RJ SECURE cable assemblies listed in this chapter
- Single-mode MT-RJ SECURE Jacks are available as pigtail assemblies. Call for details

Easy 3 Step Termination



Strip



Cleave



Lock

Jack Type	SECURE Jack Color	Figure	62.5 μ m OM1		50 μ m OM2		XG OM3 50 μ m	
			900 μ m Tight-buffered Fibers	250 μ m Coated Fiber	900 μ m Tight-buffered Fibers	250 μ m Coated Fiber	900 μ m Tight-buffered Fibers	250 μ m Coated Fiber
Outlet	Red	A	6278810-1	—	6278811-1	—	6754252-1	—
	Yellow	B	6278810-2	—	6278811-2	—	6754252-2	—
	Green	C	6278810-3	—	6278811-3	—	6754252-3	—
	Blue	D	6278810-4	—	6278811-4	—	6754252-4	—
	Rose	E	6278810-5	—	6278811-5	—	6754252-5	—
	Aqua	F	6278810-6	—	6278811-6	—	6754252-6	—
	Brown	G	6278810-7	—	6278811-7	—	6754252-7	—
	Violet	H	6278810-8	—	6278811-8	—	6754252-8	—
	Orange	I	6278810-9	—	6278811-9	—	6754252-9	—
	Slate	J	1-6278810-0	—	1-6278811-0	—	1-6754252-0	—
Patch Panel	Red	K	6588878-1	1278808-1	6588879-1	1278807-1	6693949-1	1693951-1
	Yellow		6588878-2	1278808-2	6588879-2	1278807-2	6693949-2	1693951-2
	Green		6588878-3	1278808-3	6588879-3	1278807-3	6693949-3	1693951-3
	Blue		6588878-4	1278808-4	6588879-4	1278807-4	6693949-4	1693951-4
	Rose		6588878-5	1278808-5	6588879-5	1278807-5	6693949-5	1693951-5
	Aqua		6588878-6	1278808-6	6588879-6	1278807-6	6693949-6	1693951-6
	Brown		6588878-7	1278808-7	6588879-7	1278807-7	6693949-7	1693951-7
	Violet		6588878-8	1278808-8	6588879-8	1278807-8	6693949-8	1693951-8
	Orange		6588878-9	1278808-9	6588879-9	1278807-9	6693949-9	1693951-9
	Slate		1-6588878-0	1-1278808-0	1-6588879-0	1-1278807-0	1-6693949-0	1-1693951-0

Note: Table colors are for reference only.

MT-RJ SECURE Single-mode Pigtail Jacks

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- Ten color-coded keyed designs limit improper connections in segregated networks
- MT-RJ SECURE plugs only mate with MT-RJ SECURE jacks of the same color
- Match cable fiber type to jack fiber type for correct part number
- MT-RJ optical fiber jacks terminate two fibers per jack
- Jack design eliminates need for MT-RJ SECURE adapter
- Small form factor design is half the size of SC duplex
- Can be spliced to either 250 µm coated or 900 µm tight-buffered fibers
- Can be used with fusion or mechanical splices
- Two 250 µm coated fibers in one protective 900 µm tube
- Single-mode pigtail jacks are sold individually

Description	Length	Red	Yellow	Green	Blue	Rose	Aqua	Brown	Violet	Orange	Slate
MT-RJ SECURE	1 m [3.28 ft]	6588568-1	6588569-1	6588571-1	6588570-1	6828237-1	6828238-1	6828234-1	6828236-1	6828233-1	6828235-1
Single-mode Pigtail	2 m [6.56 ft]	6588568-2	6588569-2	6588571-2	6588570-2	6828237-2	6828238-2	6828234-2	6828236-2	6828233-2	6828235-2
Jacks	3 m [9.84 ft]	6588568-3	6588569-3	6588571-3	6588570-3	6828237-3	6828238-3	6828234-3	6828236-3	6828233-3	6828235-3

Note: Table colors are for reference only.

MT-RJ SECURE Hybrid Cable Assemblies



- Assemblies have SECURE connector on one end and a standard connector on the other end for connecting to equipment
- Other constructions and combinations are available - call for details
- Ten color-coded keyed designs limit improper connections in segregated networks
- MT-RJ plugs only mate with similar type SECURE jacks of the same color
- Each MT-RJ and MT-RJ SECURE connector houses two fibers
- Standard jacket color is yellow for single-mode, orange for 50/125 µm and 62.5/125 µm, and aqua for XG OM3 50/125 µm
- Cable assemblies are riser-rated (Other ratings are available - call for details)

SECURE Color	Fiber Type	MT-RJ SECURE to MT-RJ					MT-RJ SECURE to LC Duplex				
		1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	10 m [32.81 ft]	1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	10 m [32.81 ft]
Red	62.5 µm OM1	6278890-1	6278890-2	6278890-3	6278890-5	1-6278890-0	6828104-1	6828104-2	6828104-3	6828104-5	1-6828104-0
	50 µm OM2	6278873-1	6278873-2	6278873-3	6278873-5	1-6278873-0	1907396-1	1907396-2	1907396-3	1907396-5	1-1907396-0
	XG OM3 50 µm	6754406-1	6754406-2	6754406-3	6754406-5	1-6754406-0	1918667-1	1918667-2	1918667-3	1918667-5	1-1918667-0
	Single-mode	6918733-1	6918733-2	6918733-3	6918733-5	1-6918733-0	1918668-1	1918668-2	1918668-3	1918668-5	1-1918668-0
Yellow	62.5 µm OM1	6278891-1	6278891-2	6278891-3	6278891-5	1-6278891-0	6828923-1	6828923-2	6828923-3	6828923-5	1-6828923-0
	50 µm OM2	6278874-1	6278874-2	6278874-3	6278874-5	1-6278874-0	1918669-1	1918669-2	1918669-3	1918669-5	1-1918669-0
	XG OM3 50 µm	6754407-1	6754407-2	6754407-3	6754407-5	1-6754407-0	1918670-1	1918670-2	1918670-3	1918670-5	1-1918670-0
	Single-mode	6918735-1	6918735-2	6918735-3	6918735-5	1-6918735-0	1918671-1	1918671-2	1918671-3	1918671-5	1-1918671-0
Green	62.5 µm OM1	6278892-1	6278892-2	6278892-3	6278892-5	1-6278892-0	1918673-1	1918673-2	1918673-3	1918673-5	1-1918673-0
	50 µm OM2	6278875-1	6278875-2	6278875-3	6278875-5	1-6278875-0	1907398-1	1907398-2	1907398-3	1907398-5	1-1907398-0
	XG OM3 50 µm	6754408-1	6754408-2	6754408-3	6754408-5	1-6754408-0	1918672-1	1918672-2	1918672-3	1918672-5	1-1918672-0
	Single-mode	6918737-1	6918737-2	6918737-3	6918737-5	1-6918737-0	1918674-1	1918674-2	1918674-3	1918674-5	1-1918674-0
Blue	62.5 µm OM1	6278893-1	6278893-2	6278893-3	6278893-5	1-6278893-0	1907395-1	1907395-2	1907395-3	1907395-5	1-1907395-0
	50 µm OM2	6278876-1	6278876-2	6278876-3	6278876-5	1-6278876-0	1907394-1	1907394-2	1907394-3	1907394-5	1-1907394-0
	XG OM3 50 µm	6754409-1	6754409-2	6754409-3	6754409-5	1-6754409-0	1918675-1	1918675-2	1918675-3	1918675-5	1-1918675-0
	Single-mode	6918739-1	6918739-2	6918739-3	6918739-5	1-6918739-0	1918676-1	1918676-2	1918676-3	1918676-5	1-1918676-0
Orange	62.5 µm OM1	6828275-1	6828275-2	6828275-3	6828275-5	1-6828275-0	1918679-1	1918679-2	1918679-3	1918679-5	1-1918679-0
	50 µm OM2	6828263-1	6828263-2	6828263-3	6828263-5	1-6828263-0	1918677-1	1918677-2	1918677-3	1918677-5	1-1918677-0
	XG OM3 50 µm	6828251-1	6828251-2	6828251-3	6828251-5	1-6828251-0	1918678-1	1918678-2	1918678-3	1918678-5	1-1918678-0
	Single-mode	6828239-1	6828239-2	6828239-3	6828239-5	1-6828239-0	1918680-1	1918680-2	1918680-3	1918680-5	1-1918680-0
Brown	62.5 µm OM1	6828276-1	6828276-2	6828276-3	6828276-5	1-6828276-0	1918683-1	1918683-2	1918683-3	1918683-5	1-1918683-0
	50 µm OM2	6828264-1	6828264-2	6828264-3	6828264-5	1-6828264-0	1918681-1	1918681-2	1918681-3	1918681-5	1-1918681-0
	XG OM3 50 µm	6828252-1	6828252-2	6828252-3	6828252-5	1-6828252-0	1918682-1	1918682-2	1918682-3	1918682-5	1-1918682-0
	Single-mode	6828240-1	6828240-2	6828240-3	6828240-5	1-6828240-0	1918684-1	1918684-2	1918684-3	1918684-5	1-1918684-0
Slate	62.5 µm OM1	6828277-1	6828277-2	6828277-3	6828277-5	1-6828277-0	1918687-1	1918687-2	1918687-3	1918687-5	1-1918687-0
	50 µm OM2	6828265-1	6828265-2	6828265-3	6828265-5	1-6828265-0	1918685-1	1918685-2	1918685-3	1918685-5	1-1918685-0
	XG OM3 50 µm	6828253-1	6828253-2	6828253-3	6828253-5	1-6828253-0	1918686-1	1918686-2	1918686-3	1918686-5	1-1918686-0
	Single-mode	6828241-1	6828241-2	6828241-3	6828241-5	1-6828241-0	1918688-1	1918688-2	1918688-3	1918688-5	1-1918688-0
Violet	62.5 µm OM1	6828278-1	6828278-2	6828278-3	6828278-5	1-6828278-0	1918691-1	1918691-2	1918691-3	1918691-5	1-1918691-0
	50 µm OM2	6828266-1	6828266-2	6828266-3	6828266-5	1-6828266-0	1918689-1	1918689-2	1918689-3	1918689-5	1-1918689-0
	XG OM3 50 µm	6828254-1	6828254-2	6828254-3	6828254-5	1-6828254-0	1918690-1	1918690-2	1918690-3	1918690-5	1-1918690-0
	Single-mode	6828242-1	6828242-2	6828242-3	6828242-5	1-6828242-0	1918692-1	1918692-2	1918692-3	1918692-5	1-1918692-0
Rose	62.5 µm OM1	6828279-1	6828279-2	6828279-3	6828279-5	1-6828279-0	1918695-1	1918695-2	1918695-3	1918695-5	1-1918695-0
	50 µm OM2	6828267-1	6828267-2	6828267-3	6828267-5	1-6828267-0	1918693-1	1918693-2	1918693-3	1918693-5	1-1918693-0
	XG OM3 50 µm	6828255-1	6828255-2	6828255-3	6828255-5	1-6828255-0	1918694-1	1918694-2	1918694-3	1918694-5	1-1918694-0
	Single-mode	6828243-1	6828243-2	6828243-3	6828243-5	1-6828243-0	1918696-1	1918696-2	1918696-3	1918696-5	1-1918696-0
Aqua	62.5 µm OM1	6828280-1	6828280-2	6828280-3	6828280-5	1-6828280-0	1918699-1	1918699-2	1918699-3	1918699-5	1-1918699-0
	50 µm OM2	6828268-1	6828268-2	6828268-3	6828268-5	1-6828268-0	1918697-1	1918697-2	1918697-3	1918697-5	1-1918697-0
	XG OM3 50 µm	6828256-1	6828256-2	6828256-3	6828256-5	1-6828256-0	1918698-1	1918698-2	1918698-3	1918698-5	1-1918698-0
	Single-mode	6828244-1	6828244-2	6828244-3	6828244-5	1-6828244-0	1918700-1	1918700-2	1918700-3	1918700-5	1-1918700-0

Note: Table colors are for reference only. Table continued on next page.

MT-RJ SECURE Hybrid Cable Assemblies, Continued

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SECURE Color	Fiber Type	MT-RJ SECURE to SC Duplex					MT-RJ SECURE to Dual ST				
		1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	10 m [32.81 ft]	1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	10 m [32.81 ft]
Red	62.5 µm OM1	6278894-1	6278894-2	6278894-3	6278894-5	1-6278894-0	6278898-1	6278898-2	6278898-3	6278898-5	1-6278898-0
	50 µm OM2	6278877-1	6278877-2	6278877-3	6278877-5	1-6278877-0	6278881-1	6278881-2	6278881-3	6278881-5	1-6278881-0
	XG OM3 50 µm	6754410-1	6754410-2	6754410-3	6754410-5	1-6754410-0	1918701-1	1918701-2	1918701-3	1918701-5	1-1918701-0
	Single-mode	6918734-1	6918734-2	6918734-3	6918734-5	1-6918734-0	1918702-1	1918702-2	1918702-3	1918702-5	1-1918702-0
Yellow	62.5 µm OM1	6278895-1	6278895-2	6278895-3	6278895-5	1-6278895-0	6278899-1	6278899-2	6278899-3	6278899-5	1-6278899-0
	50 µm OM2	6278878-1	6278878-2	6278878-3	6278878-5	1-6278878-0	6278882-1	6278882-2	6278882-3	6278882-5	1-6278882-0
	XG OM3 50 µm	6754411-1	6754411-2	6754411-3	6754411-5	1-6754411-0	1918703-1	1918703-2	1918703-3	1918703-5	1-1918703-0
	Single-mode	6918736-1	6918736-2	6918736-3	6918736-5	1-6918736-0	1918704-1	1918704-2	1918704-3	1918704-5	1-1918704-0
Green	62.5 µm OM1	6278896-1	6278896-2	6278896-3	6278896-5	1-6278896-0	6278900-1	6278900-2	6278900-3	6278900-5	1-6278900-0
	50 µm OM2	6278879-1	6278879-2	6278879-3	6278879-5	1-6278879-0	6278883-1	6278883-2	6278883-3	6278883-5	1-6278883-0
	XG OM3 50 µm	6754412-1	6754412-2	6754412-3	6754412-5	1-6754412-0	1918705-1	1918705-2	1918705-3	1918705-5	1-1918705-0
	Single-mode	6918738-1	6918738-2	6918738-3	6918738-5	1-6918738-0	1918706-1	1918706-2	1918706-3	1918706-5	1-1918706-0
Blue	62.5 µm OM1	6278897-1	6278897-2	6278897-3	6278897-5	1-6278897-0	6278901-1	6278901-2	6278901-3	6278901-5	1-6278901-0
	50 µm OM2	6278880-1	6278880-2	6278880-3	6278880-5	1-6278880-0	6278884-1	6278884-2	6278884-3	6278884-5	1-6278884-0
	XG OM3 50 µm	6754413-1	6754413-2	6754413-3	6754413-5	1-6754413-0	1918707-1	1918707-2	1918707-3	1918707-5	1-1918707-0
	Single-mode OS1	6918740-1	6918740-2	6918740-3	6918740-5	1-6918740-0	1918708-1	1918708-2	1918708-3	1918708-5	1-1918708-0
Orange	62.5 µm OM1	6828281-1	6828281-2	6828281-3	6828281-5	1-6828281-0	1918711-1	1918711-2	1918711-3	1918711-5	1-1918711-0
	50 µm OM2	6828269-1	6828269-2	6828269-3	6828269-5	1-6828269-0	1918709-1	1918709-2	1918709-3	1918709-5	1-1918709-0
	XG OM3 50 µm	6828257-1	6828257-2	6828257-3	6828257-5	1-6828257-0	1918710-1	1918710-2	1918710-3	1918710-5	1-1918710-0
	Single-mode	6828245-1	6828245-2	6828245-3	6828245-5	1-6828245-0	1918712-1	1918712-2	1918712-3	1918712-5	1-1918712-0
Brown	62.5 µm OM1	6828282-1	6828282-2	6828282-3	6828282-5	1-6828282-0	1918715-1	1918715-2	1918715-3	1918715-5	1-1918715-0
	50 µm OM2	6828270-1	6828270-2	6828270-3	6828270-5	1-6828270-0	1918713-1	1918713-2	1918713-3	1918713-5	1-1918713-0
	XG OM3 50 µm	6828258-1	6828258-2	6828258-3	6828258-5	1-6828258-0	1918714-1	1918714-2	1918714-3	1918714-5	1-1918714-0
	Single-mode	6828246-1	6828246-2	6828246-3	6828246-5	1-6828246-0	1918716-1	1918716-2	1918716-3	1918716-5	1-1918716-0
Slate	62.5 µm OM1	6828283-1	6828283-2	6828283-3	6828283-5	1-6828283-0	1918719-1	1918719-2	1918719-3	1918719-5	1-1918719-0
	50 µm OM2	6828271-1	6828271-2	6828271-3	6828271-5	1-6828271-0	1918717-1	1918717-2	1918717-3	1918717-5	1-1918717-0
	XG OM3 50 µm	6828259-1	6828259-2	6828259-3	6828259-5	1-6828259-0	1918718-1	1918718-2	1918718-3	1918718-5	1-1918718-0
	Single-mode	6828247-1	6828247-2	6828247-3	6828247-5	1-6828247-0	1918720-1	1918720-2	1918720-3	1918720-5	1-1918720-0
Violet	62.5 µm OM1	6828284-1	6828284-2	6828284-3	6828284-5	1-6828284-0	1918723-1	1918723-2	1918723-3	1918723-5	1-1918723-0
	50 µm OM2	6828272-1	6828272-2	6828272-3	6828272-5	1-6828272-0	1918721-1	1918721-2	1918721-3	1918721-5	1-1918721-0
	XG OM3 50 µm	6828260-1	6828260-2	6828260-3	6828260-5	1-6828260-0	1918722-1	1918722-2	1918722-3	1918722-5	1-1918722-0
	Single-mode	6828248-1	6828248-2	6828248-3	6828248-5	1-6828248-0	1918724-1	1918724-2	1918724-3	1918724-5	1-1918724-0
Rose	62.5 µm OM1	6828285-1	6828285-2	6828285-3	6828285-5	1-6828285-0	1918727-1	1918727-2	1918727-3	1918727-5	1-1918727-0
	50 µm OM2	6828273-1	6828273-2	6828273-3	6828273-5	1-6828273-0	1918725-1	1918725-2	1918725-3	1918725-5	1-1918725-0
	XG OM3 50 µm	6828261-1	6828261-2	6828261-3	6828261-5	1-6828261-0	1918726-1	1918726-2	1918726-3	1918726-5	1-1918726-0
	Single-mode	6828249-1	6828249-2	6828249-3	6828249-5	1-6828249-0	1918728-1	1918728-2	1918728-3	1918728-5	1-1918728-0
Aqua	62.5 µm OM1	6828286-1	6828286-2	6828286-3	6828286-5	1-6828286-0	1918731-1	1918731-2	1918731-3	1918731-5	1-1918731-0
	50 µm OM2	1828274-1	1828274-2	1828274-3	1828274-5	1-1828274-0	1918729-1	1918729-2	1918729-3	1918729-5	1-1918729-0
	XG OM3 50 µm	6828262-1	6828262-2	6828262-3	6828262-5	1-6828262-0	1918730-1	1918730-2	1918730-3	1918730-5	1-1918730-0
	Single-mode	6828250-1	6828250-2	6828250-3	6828250-5	1-6828250-0	1918732-1	1918732-2	1918732-3	1918732-5	1-1918732-0

Note: Table colors are for reference only. Continued from previous page.

MPO SECURE Optical Fiber Cassettes

12



- Ten color-coded keyed designs limit improper connections in segregated networks
- MPO SECURE plugs only mate with MPO SECURE adapters of the same color
- Cassettes have one MPO SECURE connection (12-Fiber) or two MPO SECURE connections (24-Fiber) on the back
- Cassettes house one or two 12-fiber break-out assemblies
- MPO SECURE cassette color matches the LC SECURE or MT-RJ SECURE adapter color of the cassette
- Cassette fiber polarity is Pair-Flipped (AB/BA)
- Cassettes with Pair-Straight polarity (AB/AB) are available - call for details
- Cassettes have same footprint as the snap-in adapter plates and fit in unloaded optical fiber enclosures listed in Chapters 15
- Factory tested and ready for installation
- Quick Ship available for MPO SECURE cassettes

SECURE Color	Fiber Count	Duplex Port Count	MT-RJ SECURE				LC SECURE			
			62.5 μ m OM1	50 μ m OM2	XG OM3 50 μ m	Single-mode	62.5 μ m OM1	50 μ m OM2	XG OM3 50 μ m	Single-mode
Red	12	6	6754285-2	6754286-2	1918777-2	1938996-2	1918781-2	1918779-2	1918783-2	1938056-2
	24	12	6754287-2	6754288-2	1918778-2	6828819-2	1918782-2	1918780-2	1918784-2	1938965-2
Green	12	6	6754285-3	6754286-3	1918777-3	1938996-3	1918781-3	1918779-3	1918783-3	1938056-3
	24	12	6754287-3	6754288-3	1918778-3	6828819-3	1918782-3	1918780-3	1918784-3	1938965-3
Blue	12	6	6754285-4	6754286-4	1918777-4	1938996-4	1918781-4	1918779-4	1918783-4	1938056-4
	24	12	6754287-4	6754288-4	1918778-4	6828819-4	1918782-4	1918780-4	1918784-4	1938965-4
Yellow	12	6	6754285-5	6754286-5	1918777-5	1938996-5	1918781-5	1918779-5	1918783-5	1938056-5
	24	12	6754287-5	6754288-5	1918778-5	6828819-5	1918782-5	1918780-5	1918784-5	1938965-5
Orange	12	6	6754285-6	6754286-6	1918777-6	1938996-6	1918781-6	1918779-6	1918783-6	1938056-6
	24	12	6754287-6	6754288-6	1918778-6	6828819-6	1918782-6	1918780-6	1918784-6	1938965-6
Brown	12	6	6754285-7	6754286-7	1918777-7	1938996-7	1918781-7	1918779-7	1918783-7	1938056-7
	24	12	6754287-7	6754288-7	1918778-7	6828819-7	1918782-7	1918780-7	1918784-7	1938965-7
Violet	12	6	6754285-8	6754286-8	1918777-8	1938996-8	1918781-8	1918779-8	1918783-8	1938056-8
	24	12	6754287-8	6754288-8	1918778-8	6828819-8	1918782-8	1918780-8	1918784-8	1938965-8
Rose	12	6	6754285-9	6754286-9	1918777-9	1938996-9	1918781-9	1918779-9	1918783-9	1938056-9
	24	12	6754287-9	6754288-9	1918778-9	6828819-9	1918782-9	1918780-9	1918784-9	1938965-9
Slate	12	6	1-6754285-0	1-6754286-0	1-1918777-0	1-1938996-0	1-1918781-0	1-1918779-0	1-1918783-0	1-1938056-0
	24	12	1-6754287-0	1-6754288-0	1-1918778-0	1-6828819-0	1-1918782-0	1-1918780-0	1-1918784-0	1-1938965-0
Aqua	12	6	1-6754285-1	1-6754286-1	1-1918777-1	1-1938996-1	1-1918781-1	1-1918779-1	1-1918783-1	1-1938056-1
	24	12	1-6754287-1	1-6754288-1	1-1918778-1	1-6828819-1	1-1918782-1	1-1918780-1	1-1918784-1	1-1938965-1

Note: Table colors are for reference only.

MPO SECURE Trunk Cable Assemblies, Plenum (OFNP)

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- Ten color-coded keyed designs limit improper connections in segregated networks
- MPO SECURE plugs only mate with MPO SECURE adapters of the same color
- Twelve (12) fibers per MPO SECURE connector
- Easy installation - MPO SECURE plugs are push/pull connectors
- Plenum cables can be used in riser spaces
- Trunk cables come pre-tested and ready for immediate use with MPO SECURE plugs on both ends
- Pulling socks protect MPO SECURE terminations during installation
- Trunk cable fiber polarity is Pair-Flipped (AB/BA)
- Quick Ship available for MPO SECURE cable assemblies
- Trunk cables with straight-through polarity (AB/AB) are available - call for details
- 12 and 24 fiber MPO SECURE trunk cables meet or exceed the requirements of GR-409-CORE and UL/NEC rating for Riser and Plenum applications
- Additional fiber counts and custom lengths are available - call for details
- Standard lengths are in 10 ft increments from 10 to 300 ft

Fiber Count	Fiber Type	Length	Red	Yellow	Green	Blue	Rose	Aqua	Brown	Violet	Orange	Slate
12	62.5 μ m OM1	10 ft	6754269-1	6754272-1	6754270-1	6754271-1	1918747-1	1918748-1	1918749-1	1918750-1	1918751-1	1918752-1
		20 ft	6754269-2	6754272-2	6754270-2	6754271-2	1918747-2	1918748-2	1918749-2	1918750-2	1918751-2	1918752-2
		30 ft	6754269-3	6754272-3	6754270-3	6754271-3	1918747-3	1918748-3	1918749-3	1918750-3	1918751-3	1918752-3
		40 ft	6754269-4	6754272-4	6754270-4	6754271-4	1918747-4	1918748-4	1918749-4	1918750-4	1918751-4	1918752-4
		50 ft	6754269-5	6754272-5	6754270-5	6754271-5	1918747-5	1918748-5	1918749-5	1918750-5	1918751-5	1918752-5
		100 ft	1-6754269-0	1-6754272-0	1-6754270-0	1-6754271-0	1-1918747-0	1-1918748-0	1-1918749-0	1-1918750-0	1-1918751-0	1-1918752-0
	50 μ m OM2	200 ft	2-6754269-0	2-6754272-0	2-6754270-0	2-6754271-0	2-1918747-0	2-1918748-0	2-1918749-0	2-1918750-0	2-1918751-0	2-1918752-0
		300 ft	3-6754269-0	3-6754272-0	3-6754270-0	3-6754271-0	3-1918747-0	3-1918748-0	3-1918749-0	3-1918750-0	3-1918751-0	3-1918752-0
		10 ft	6754273-1	6754276-1	6754274-1	6754275-1	1918741-1	1918742-1	1918743-1	1918744-1	1918745-1	1918746-1
		20 ft	6754273-2	6754276-2	6754274-2	6754275-2	1918741-2	1918742-2	1918743-2	1918744-2	1918745-2	1918746-2
		30 ft	6754273-3	6754276-3	6754274-3	6754275-3	1918741-3	1918742-3	1918743-3	1918744-3	1918745-3	1918746-3
		40 ft	6754273-4	6754276-4	6754274-4	6754275-4	1918741-4	1918742-4	1918743-4	1918744-4	1918745-4	1918746-4
	XG OM3 50 μ m	50 ft	6754273-5	6754276-5	6754274-5	6754275-5	1918741-5	1918742-5	1918743-5	1918744-5	1918745-5	1918746-5
		100 ft	1-6754273-0	1-6754276-0	1-6754274-0	1-6754275-0	1-1918741-0	1-1918742-0	1-1918743-0	1-1918744-0	1-1918745-0	1-1918746-0
		200 ft	2-6754273-0	2-6754276-0	2-6754274-0	2-6754275-0	2-1918741-0	2-1918742-0	2-1918743-0	2-1918744-0	2-1918745-0	2-1918746-0
		300 ft	3-6754273-0	3-6754276-0	3-6754274-0	3-6754275-0	3-1918741-0	3-1918742-0	3-1918743-0	3-1918744-0	3-1918745-0	3-1918746-0
		10 ft	6754420-1	6754421-1	6754422-1	6754423-1	1918753-1	1918754-1	1918755-1	1918756-1	1918757-1	1918758-1
		20 ft	6754420-2	6754421-2	6754422-2	6754423-2	1918753-2	1918754-2	1918755-2	1918756-2	1918757-2	1918758-2
	62.5 μ m OM1	30 ft	6754420-3	6754421-3	6754422-3	6754423-3	1918753-3	1918754-3	1918755-3	1918756-3	1918757-3	1918758-3
		40 ft	6754420-4	6754421-4	6754422-4	6754423-4	1918753-4	1918754-4	1918755-4	1918756-4	1918757-4	1918758-4
		50 ft	6754420-5	6754421-5	6754422-5	6754423-5	1918753-5	1918754-5	1918755-5	1918756-5	1918757-5	1918758-5
		100 ft	1-6754420-0	1-6754421-0	1-6754422-0	1-6754423-0	1-1918753-0	1-1918754-0	1-1918755-0	1-1918756-0	1-1918757-0	1-1918758-0
		200 ft	2-6754420-0	2-6754421-0	2-6754422-0	2-6754423-0	2-1918753-0	2-1918754-0	2-1918755-0	2-1918756-0	2-1918757-0	2-1918758-0
		300 ft	3-6754420-0	3-6754421-0	3-6754422-0	3-6754423-0	3-1918753-0	3-1918754-0	3-1918755-0	3-1918756-0	3-1918757-0	3-1918758-0
24	62.5 μ m OM1	10 ft	6754277-1	6754280-1	6754278-1	6754279-1	1918765-1	1918766-1	1918767-1	1918768-1	1918769-1	1918770-1
		20 ft	6754277-2	6754280-2	6754278-2	6754279-2	1918765-2	1918766-2	1918767-2	1918768-2	1918769-2	1918770-2
		30 ft	6754277-3	6754280-3	6754278-3	6754279-3	1918765-3	1918766-3	1918767-3	1918768-3	1918769-3	1918770-3
		40 ft	6754277-4	6754280-4	6754278-4	6754279-4	1918765-4	1918766-4	1918767-4	1918768-4	1918769-4	1918770-4
		50 ft	6754277-5	6754280-5	6754278-5	6754279-5	1918765-5	1918766-5	1918767-5	1918768-5	1918769-5	1918770-5
		100 ft	1-6754277-0	1-6754280-0	1-6754278-0	1-6754279-0	1-1918765-0	1-1918766-0	1-1918767-0	1-1918768-0	1-1918769-0	1-1918770-0
	50 μ m OM2	200 ft	2-6754277-0	2-6754280-0	2-6754278-0	2-6754279-0	2-1918765-0	2-1918766-0	2-1918767-0	2-1918768-0	2-1918769-0	2-1918770-0
		300 ft	3-6754277-0	3-6754280-0	3-6754278-0	3-6754279-0	3-1918765-0	3-1918766-0	3-1918767-0	3-1918768-0	3-1918769-0	3-1918770-0
		10 ft	6754281-1	6754284-1	6754282-1	6754283-1	1918759-1	1918760-1	1918761-1	1918762-1	1918763-1	1918764-1
		20 ft	6754281-2	6754284-2	6754282-2	6754283-2	1918759-2	1918760-2	1918761-2	1918762-2	1918763-2	1918764-2
		30 ft	6754281-3	6754284-3	6754282-3	6754283-3	1918759-3	1918760-3	1918761-3	1918762-3	1918763-3	1918764-3
		40 ft	6754281-4	6754284-4	6754282-4	6754283-4	1918759-4	1918760-4	1918761-4	1918762-4	1918763-4	1918764-4
	XG OM3 50 μ m	50 ft	6754281-5	6754284-5	6754282-5	6754283-5	1918759-5	1918760-5	1918761-5	1918762-5	1918763-5	1918764-5
		100 ft	1-6754281-0	1-6754284-0	1-6754282-0	1-6754283-0	1-1918759-0	1-1918760-0	1-1918761-0	1-1918762-0	1-1918763-0	1-1918764-0
		200 ft	2-6754281-0	2-6754284-0	2-6754282-0	2-6754283-0	2-1918759-0	2-1918760-0	2-1918761-0	2-1918762-0	2-1918763-0	2-1918764-0
		300 ft	3-6754281-0	3-6754284-0	3-6754282-0	3-6754283-0	3-1918759-0	3-1918760-0	3-1918761-0	3-1918762-0	3-1918763-0	3-1918764-0
		10 ft	6754424-1	6754425-1	6754426-1	6754427-1	1918771-1	1918772-1	1918773-1	1918774-1	1918775-1	1918776-1
		20 ft	6754424-2	6754425-2	6754426-2	6754427-2	1918771-2	1918772-2	1918773-2	1918774-2	1918775-2	1918776-2
	XG OM3 50 μ m	30 ft	6754424-3	6754425-3	6754426-3	6754427-3	1918771-3	1918772-3	1918773-3	1918774-3	1918775-3	1918776-3
		40 ft	6754424-4	6754425-4	6754426-4	6754427-4	1918771-4	1918772-4	1918773-4	1918774-4	1918775-4	1918776-4
		50 ft	6754424-5	6754425-5	6754426-5	6754427-5	1918771-5	1918772-5	1918773-5	1918774-5	1918775-5	1918776-5
		100 ft	1-6754424-0	1-6754425-0	1-6754426-0	1-6754427-0	1-1918771-0	1-1918772-0	1-1918773-0	1-1918774-0	1-1918775-0	1-1918776-0
		200 ft	2-6754424-0	2-6754425-0	2-6754426-0	2-6754427-0	2-1918771-0	2-1918772-0	2-1918773-0	2-1918774-0	2-1918775-0	2-1918776-0
		300 ft	3-6754424-0	3-6754425-0	3-6754426-0	3-6754427-0	3-1918771-0	3-1918772-0	3-1918773-0	3-1918774-0	3-1918775-0	3-1918776-0

Note: Table colors are for reference only.

RJ45 SECURE SL Series Category 6 Modular Jacks

12



- Six color-coded keyed designs limit improper connections in segregated networks
- RJ45 SECURE plugs only mate with RJ45 SECURE jacks of the same color
- Configure faceplates with one or more RJ45 SECURE connectors to provide a common access point to multiple segregated or secure networks
- Same thin profile as standard RJ45 SL Series jacks - easily snaps into SL Series modules, duplex mounting straps, patch panels, and enclosures
- May be used in straight or angled faceplate modules
- 180° cable dress for easy termination
- Unshielded jacks also allow 90° cable dress
- Universal wiring label permits wiring to T568A or T568B
- Bend-limiting strain relief included with unshielded jacks
- UL Listed: E81956
- 8-Position RJ45 SECURE Modular Jacks for 1-, 2-, 3-, and 4-Pair applications
- Shielded and unshielded jacks
- Can be terminated with SL Series Modular Jack Termination Tool 1725150-1

Terminated Shielded Jack

Shielding	Rear Cable Entry	Figure	Red	Yellow	Green	Blue	Violet	Orange
Unshielded	90° or 180°	A	1479794-1	1479794-2	1479794-3	1479794-4	1479794-8	1479794-9
Shielded	180°	B	1479795-1	1479795-2	1479795-3	1479795-4	1479795-8	1479795-9

Note: Table colors are for reference only.

RJ45 SECURE Category 6 Modular Plugs

- Six color-coded keyed designs limit improper connections in segregated networks
- RJ45 SECURE plugs only mate with RJ45 SECURE jacks of the same color
- See Chapter 02 for Color-matched snagless boots
- 5 - 6 mm plug terminated with Pro-Crimper III hand-tool 354940-1 and die set 1976200-2 or combination tool/die set 1976200-1
- 6 - 7 mm plug terminated with Pro-Crimper III hand-tool 354940-1 and die set 1976200-4 or combination tool/die set 1976200-3

Conductor Type	Cable O.D.	Quantity Per Box	Red	Yellow	Green	Blue	Violet	Orange	Gray (Universally Keyed)
Stranded	5 - 6 mm	1000	5-1479802-1	5-1479804-1	5-1479806-1	5-1479808-1	5-1499675-1	5-1499677-1	5-1499679-1
		500	5-1479802-2	5-1479804-2	5-1479806-2	5-1479808-2	5-1499675-2	5-1499677-2	5-1499679-2
		100	5-1479802-3	5-1479804-3	5-1479806-3	5-1479808-3	5-1499675-3	5-1499677-3	5-1499679-3
		25	5-1479802-4	5-1479804-4	5-1479806-4	5-1479808-4	5-1499675-4	5-1499677-4	5-1499679-4
	6 - 7 mm	1000	5-1499549-1	5-1499551-1	5-1499553-1	5-1499555-1	5-1499557-1	5-1499559-1	5-1499561-1
		500	5-1499549-2	5-1499551-2	5-1499553-2	5-1499555-2	5-1499557-2	5-1499559-2	5-1499561-2
		100	5-1499549-3	5-1499551-3	5-1499553-3	5-1499555-3	5-1499557-3	5-1499559-3	5-1499561-3
		25	5-1499549-4	5-1499551-4	5-1499553-4	5-1499555-4	5-1499557-4	5-1499559-4	5-1499561-4
	5 - 6 mm	1000	5-1479803-1	5-1479805-1	5-1479807-1	5-1479809-1	5-1499676-1	5-1499678-1	5-1499680-1
		500	5-1479803-2	5-1479805-2	5-1479807-2	5-1479809-2	5-1499676-2	5-1499678-2	5-1499680-2
		100	5-1479803-3	5-1479805-3	5-1479807-3	5-1479809-3	5-1499676-3	5-1499678-3	5-1499680-3
		25	5-1479803-4	5-1479805-4	5-1479807-4	5-1479809-4	5-1499676-4	5-1499678-4	5-1499680-4
Solid	6 - 7 mm	1000	5-1499550-1	5-1499552-1	5-1499554-1	5-1499556-1	5-1499558-1	5-1499560-1	5-1499562-1
		500	5-1499550-2	5-1499552-2	5-1499554-2	5-1499556-2	5-1499558-2	5-1499560-2	5-1499562-2
		100	5-1499550-3	5-1499552-3	5-1499554-3	5-1499556-3	5-1499558-3	5-1499560-3	5-1499562-3
		25	5-1499550-4	5-1499552-4	5-1499554-4	5-1499556-4	5-1499558-4	5-1499560-4	5-1499562-4

Note: Table colors are for reference only.

RJ45 SECURE Category 6 Patch Cable Assemblies

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- Six color-coded keyed designs limit improper connections in segregated networks
- RJ45 SECURE plugs only mate with RJ45 SECURE jacks of the same color
- RJ45 SECURE assemblies have a standard plug on one end and a RJ45 SECURE plug on the other end
- Color-matched snagless boots
- Universal wiring (T568A/T568B)
- 26 AWG stranded conductors
- Shielded and unshielded cable assemblies
- Cable assemblies are riser-rated

Length	Red		Yellow		Green	
	Unshielded	Shielded	Unshielded	Shielded	Unshielded	Shielded
2 ft [0.61 m]	1499841-2	1499848-2	1499842-2	1499849-2	1499843-2	1499850-2
3 ft [0.91 m]	1499841-3	1499848-3	1499842-3	1499849-3	1499843-3	1499850-3
4 ft [1.22 m]	1499841-4	1499848-4	1499842-4	1499849-4	1499843-4	1499850-4
5 ft [1.52 m]	1499841-5	1499848-5	1499842-5	1499849-5	1499843-5	1499850-5
6 ft [1.83 m]	1499841-6	1499848-6	1499842-6	1499849-6	1499843-6	1499850-6
7 ft [2.13 m]	1499841-7	1499848-7	1499842-7	1499849-7	1499843-7	1499850-7
8 ft [2.44 m]	1499841-8	1499848-8	1499842-8	1499849-8	1499843-8	1499850-8
9 ft [2.74 m]	1499841-9	1499848-9	1499842-9	1499849-9	1499843-9	1499850-9
10 ft [3.05 m]	1-1499841-0	1-1499848-0	1-1499842-0	1-1499849-0	1-1499843-0	1-1499850-0
12 ft [3.66 m]	1-1499841-2	1-1499848-2	1-1499842-2	1-1499849-2	1-1499843-2	1-1499850-2
14 ft [4.27 m]	1-1499841-4	1-1499848-4	1-1499842-4	1-1499849-4	1-1499843-4	1-1499850-4
16 ft [4.88 m]	1-1499841-6	1-1499848-6	1-1499842-6	1-1499849-6	1-1499843-6	1-1499850-6
20 ft [6.10 m]	2-1499841-0	2-1499848-0	2-1499842-0	2-1499849-0	2-1499843-0	2-1499850-0
25 ft [7.62 m]	2-1499841-5	2-1499848-5	2-1499842-5	2-1499849-5	2-1499843-5	2-1499850-5
30 ft [9.14 m]	3-1499841-0	3-1499848-0	3-1499842-0	3-1499849-0	3-1499843-0	3-1499850-0
40 ft [12.19 m]	4-1499841-0	4-1499848-0	4-1499842-0	4-1499849-0	4-1499843-0	4-1499850-0
50 ft [15.24 m]	5-1499841-0	5-1499848-0	5-1499842-0	5-1499849-0	5-1499843-0	5-1499850-0

Note: Table colors are for reference only.

Length	Blue		Violet		Orange	
	Unshielded	Shielded	Unshielded	Shielded	Unshielded	Shielded
2 ft [0.61 m]	1499844-2	1499851-2	1499845-2	1499852-2	1499846-2	1499853-2
3 ft [0.91 m]	1499844-3	1499851-3	1499845-3	1499852-3	1499846-3	1499853-3
4 ft [1.22 m]	1499844-4	1499851-4	1499845-4	1499852-4	1499846-4	1499853-4
5 ft [1.52 m]	1499844-5	1499851-5	1499845-5	1499852-5	1499846-5	1499853-5
6 ft [1.83 m]	1499844-6	1499851-6	1499845-6	1499852-6	1499846-6	1499853-6
7 ft [2.13 m]	1499844-7	1499851-7	1499845-7	1499852-7	1499846-7	1499853-7
8 ft [2.44 m]	1499844-8	1499851-8	1499845-8	1499852-8	1499846-8	1499853-8
9 ft [2.74 m]	1499844-9	1499851-9	1499845-9	1499852-9	1499846-9	1499853-9
10 ft [3.05 m]	1-1499844-0	1-1499851-0	1-1499845-0	1-1499852-0	1-1499846-0	1-1499853-0
12 ft [3.66 m]	1-1499844-2	1-1499851-2	1-1499845-2	1-1499852-2	1-1499846-2	1-1499853-2
14 ft [4.27 m]	1-1499844-4	1-1499851-4	1-1499845-4	1-1499852-4	1-1499846-4	1-1499853-4
16 ft [4.88 m]	1-1499844-6	1-1499851-6	1-1499845-6	1-1499852-6	1-1499846-6	1-1499853-6
20 ft [6.10 m]	2-1499844-0	2-1499851-0	2-1499845-0	2-1499852-0	2-1499846-0	2-1499853-0
25 ft [7.62 m]	2-1499844-5	2-1499851-5	2-1499845-5	2-1499852-5	2-1499846-5	2-1499853-5
30 ft [9.14 m]	3-1499844-0	3-1499851-0	3-1499845-0	3-1499852-0	3-1499846-0	3-1499853-0
40 ft [12.19 m]	4-1499844-0	4-1499851-0	4-1499845-0	4-1499852-0	4-1499846-0	4-1499853-0
50 ft [15.24 m]	5-1499844-0	5-1499851-0	5-1499845-0	5-1499852-0	5-1499846-0	5-1499853-0

Note: Table colors are for reference only.

Security Key Plug

12



- Works with standard RJ45 jacks
- Prevents unauthorized port connections
- Prevents disconnection from active devices
- Lock to RJ45 modular jacks
- Can be used in public areas or conference rooms
- 1871456-1 key/lock pairs are randomly selected from 100 different key numbers (numbered 800-899)
- 1871456-2, -3, and -4 use specific reserved key/lock pair number 456A
- RoHS compliant

Description	Included Keys	Part Number
Security Key Plug with	2 Keys (random number)	1871456-1
Security Key Plug (reserved number)	2 Keys (reserved number)	1871456-2
Key for Reserved Number Security Key Plug	None (for use with 1871456-4)	1871456-3
	—	1871456-4

Security Key Jack



- Works with standard RJ45 plugs
- Prevents unauthorized port connections
- Prevents disconnection from active devices
- Lock to RJ45 modular plugs
- Can be used to secure un-used patch cords
- Uses specific reserved key/lock pair number 456A
- RoHS compliant

Description	Included Keys	Part Number
Security Key Jack	2 Keys (reserved number)	1-1871456-2

Security Key Patch Cord

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Cat 6A Patch Cord



Cat 6 Patch Cord



- Works with standard RJ45 ports
- Prevents disconnection from active devices
- Prevent unauthorized disconnection
- Can be used for secure connections (e.g. server lines)
- Uses specific reserved key/lock pair number 456A (two keys included)
- RoHS compliant
- Category 6 patch cables are backwardly compatible with Category 5e components
- Security patch cord color:
 - Cat 6: Black
 - Cat 6A F/UTP: Blue

Category	Length	Locks on Both Ends	Locks on one End
Cat 6 Unshielded	1 ft [0.30 m]	2111179-1	2111225-1
	2 ft [0.61 m]	2111179-2	2111225-2
	3 ft [0.91 m]	2111179-3	2111225-3
	4 ft [1.22 m]	2111179-4	2111225-4
	5 ft [1.52 m]	2111179-5	2111225-5
	6 ft [1.83 m]	2111179-6	2111225-6
	7 ft [2.13 m]	2111179-7	2111225-7
	8 ft [2.44 m]	2111179-8	2111225-8
	9 ft [2.74 m]	2111179-9	2111225-9
	10 ft [3.05 m]	1-2111179-0	1-2111225-0
	12 ft [3.66 m]	1-2111179-2	1-2111225-2
	14 ft [4.27 m]	1-2111179-4	1-2111225-4
	16 ft [4.88 m]	1-2111179-6	1-2111225-6
	18 ft [5.49 m]	1-2111179-8	1-2111225-8
	20 ft [6.10 m]	2-2111179-0	2-2111225-0
Cat 6A Shielded	1 ft [0.30 m]	2111190-1	2111236-1
	2 ft [0.61 m]	2111190-2	2111236-2
	3 ft [0.91 m]	2111190-3	2111236-3
	4 ft [1.22 m]	2111190-4	2111236-4
	5 ft [1.52 m]	2111190-5	2111236-5
	6 ft [1.83 m]	2111190-6	2111236-6
	7 ft [2.13 m]	2111190-7	2111236-7
	8 ft [2.44 m]	2111190-8	2111236-8
	9 ft [2.74 m]	2111190-9	2111236-9
	10 ft [3.05 m]	1-2111190-0	1-2111236-0
	12 ft [3.66 m]	1-2111190-2	1-2111236-2
	14 ft [4.27 m]	1-2111190-4	1-2111236-4
	16 ft [4.88 m]	1-2111190-6	1-2111236-6
	18 ft [5.49 m]	1-2111190-8	1-2111236-8
	20 ft [6.10 m]	2-2111190-0	2-2111236-0



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Summary

The requirements of today's rapidly growing and changing infrastructures are no longer satisfied by traditional IT infrastructure management but need intelligent, real-time management. An Intelligent Infrastructure Management System (IIMS) is critical to providing accurate cable and network management information into the IT Infrastructure Library (ITIL).

The AMPTRAC Connectivity Management System turns cabling systems and their connected devices into intelligent networks by reducing costly and time-consuming manual cable management. With this system, you can track and document all moves, adds and changes to your network from a centralized location as they occur. This fully automated system optimizes asset utilization, maintains accurate documentation and helps prevent costly errors.

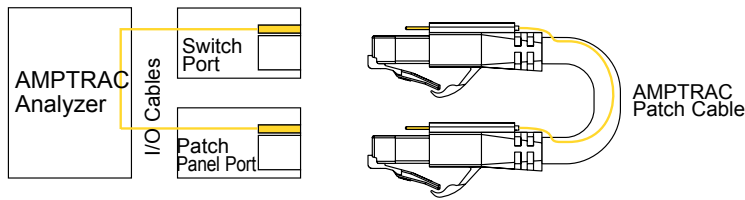
The AMPTRAC Connectivity Management System's easy-to-implement hardware coupled with iTRACS IM cutting-edge software can be integrated into new or existing networks. By allowing you to proactively respond to any changes in connectivity through customizable alerts or alarms, the iTRACS software optimizes your network monitoring and security. AMPTRAC hardware when used in conjunction with iTRACS software provides the missing link that integrates network management and physical layer management – revolutionizing the way networks are controlled and documented.

This one-of-a-kind infrastructure management system automatically generates a complete physical topology of your network at the Telecommunications Room/Data Center, while helping you manage and troubleshoot the network remotely.

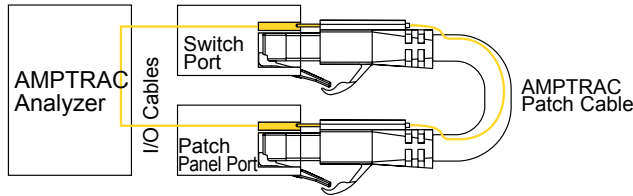
System Facts and Features

- Reduces downtime and response time
- Integrates network and physical layer management
- Helps to increase productivity
- Reduces operating costs
- Improves port and asset utilization
- Provides accurate and timely information
- Improves service levels
- Provides alerts and alarms for all changes relating to devices and their connectivity
- Provides work order control module with auto-provisioning
- Over 60 detailed reports available
- Audit trail based on historical log file
- Simplified installation and design with stackable, configurable Analyzer
- Complete product line support
 - XG Cat 6A shielded
 - Cat 6 unshielded
 - Fiber (SC and LC)
 - MPO (fiber) and MRJ 21 (copper)
- Analyzer LCD displays work order and circuit trace information
- Analyzer provides good and bad audible tone alerts and confirmations
- Analyzer generates remedial work actions to fix unauthorized moves, adds and changes
- Support for non-English languages

Open Circuit



Closed Circuit

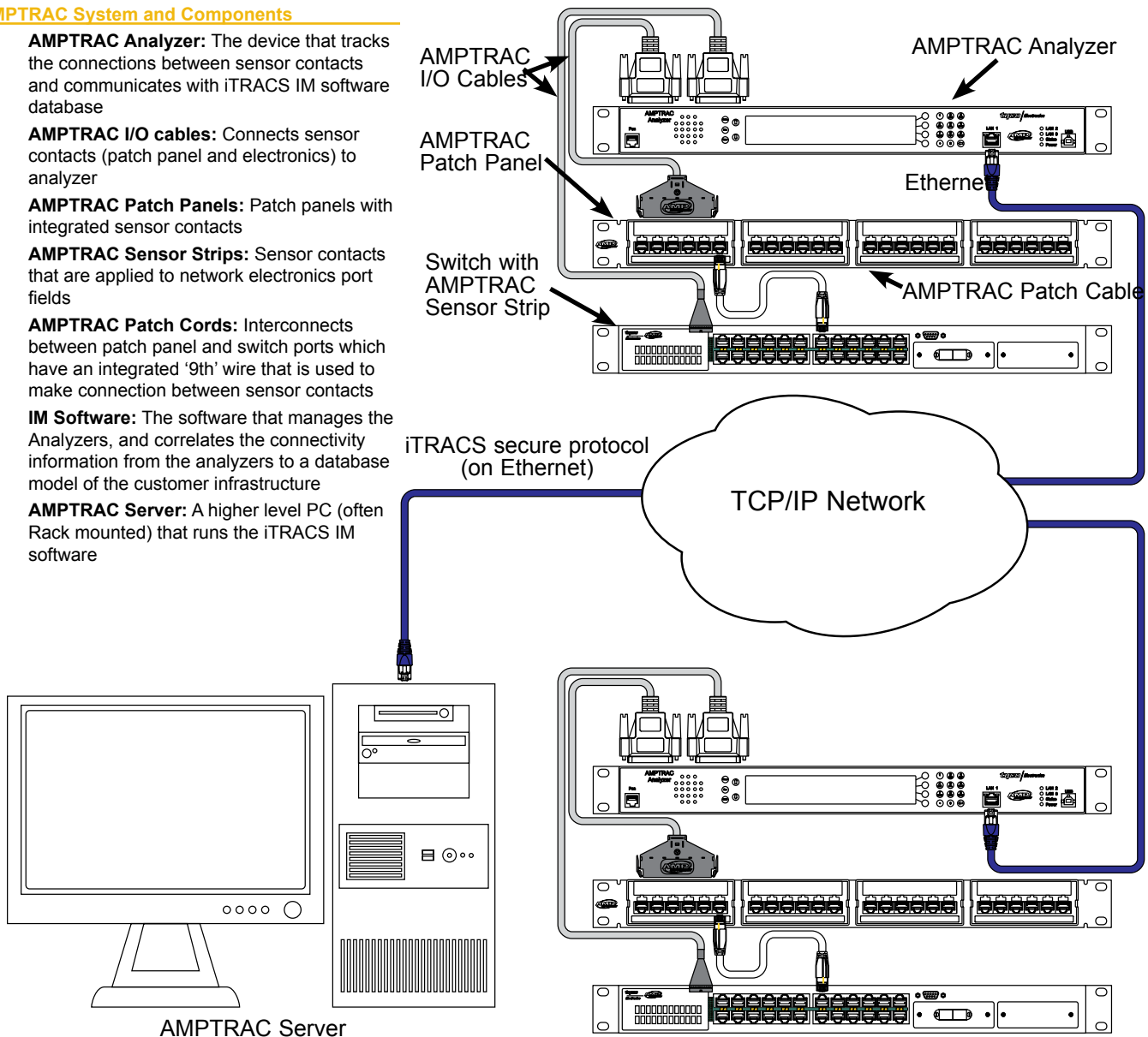


AMPTRAC Basic Operating Principle

- 9th wire technology in patch cord establishes open and closed circuit which can be monitored
- Analyzer monitors open/closed circuit and tracks connectivity
- Analyzer sends data to iTRACS IM software database
- iTRACS IM software sends work order and circuit info to AMPTRAC Analyzer

AMPTRAC System and Components

- AMPTRAC Analyzer:** The device that tracks the connections between sensor contacts and communicates with iTRACS IM software database
- AMPTRAC I/O cables:** Connects sensor contacts (patch panel and electronics) to analyzer
- AMPTRAC Patch Panels:** Patch panels with integrated sensor contacts
- AMPTRAC Sensor Strips:** Sensor contacts that are applied to network electronics port fields
- AMPTRAC Patch Cords:** Interconnects between patch panel and switch ports which have an integrated '9th' wire that is used to make connection between sensor contacts
- IM Software:** The software that manages the Analyzers, and correlates the connectivity information from the analyzers to a database model of the customer infrastructure
- AMPTRAC Server:** A higher level PC (often Rack mounted) that runs the iTRACS IM software



iTRACS® Infrastructure Manager™ Software – Software for the AMPTRAC Connectivity Management System

13

The Product Design

iTRACS Infrastructure Manager software has been designed for customers of Tyco Electronics, as it functions in tandem with AMPTRAC hardware. The software is designed to explore and discover and map the connectivity of the customer network. It is further designed to simplify the process of all future moves, adds and changes (MACs) of end-users. The software allows simultaneous access by a spectrum of department representatives; these include help desk, planning, network administration, supervision and technicians.

The Client Customers - The Problems of Complex Networks - Solved

iTRACS IM software is ideally suited to customers with complex data/telecom networks and critical applications. Examples include financial institutions, insurance providers, data centers, high security government facilities, military defense facilities, airports, medical centers, universities and corporate headquarters.

These customers and clients share the difficult management of complicated networks, requiring accurate record-keeping, high security, and frequent MACs. The simplification of the work order process also provides valuable benefits to client networks of any size, from small to enterprise network.

Product Leadership

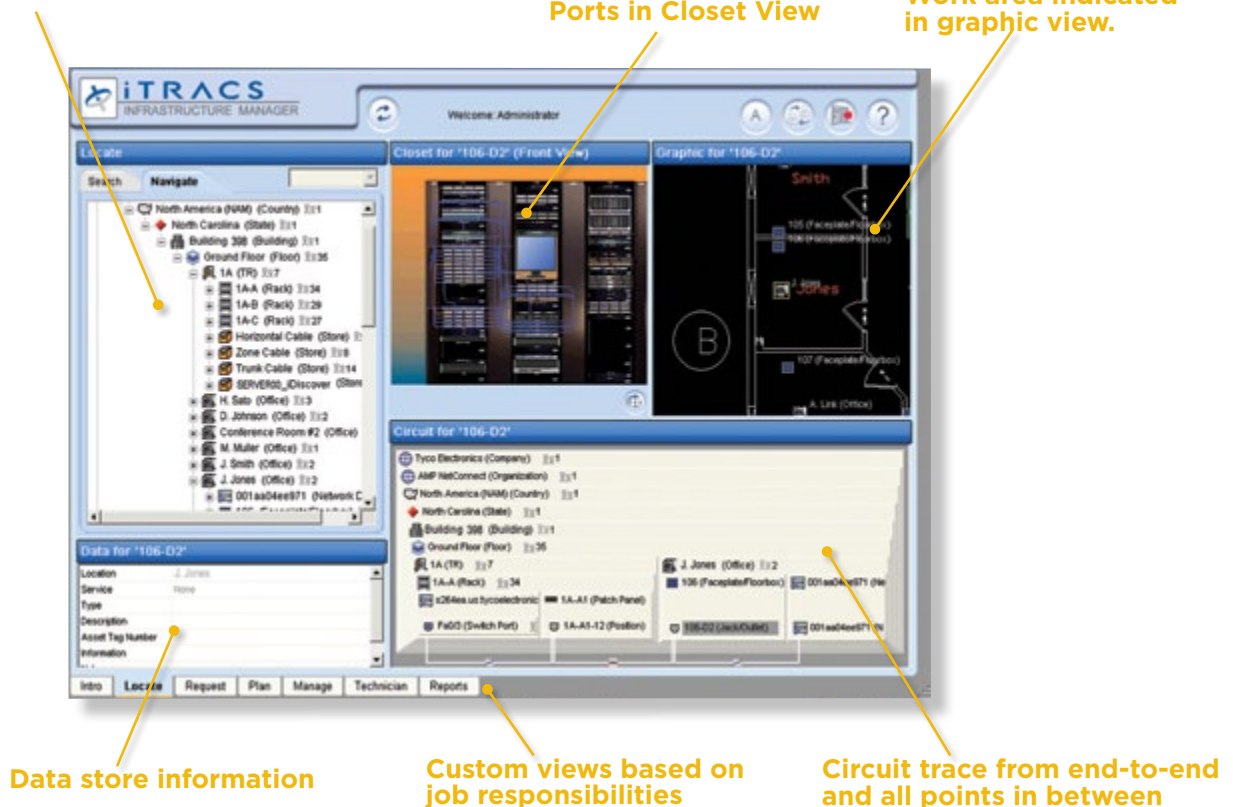
iTRACS IM Software, as one of the earliest developers of Cable Management Software (CMS), has maintained an international leadership position in CMS design for more than 15 years. iTRACS IM software has been specifically designed to automate the MAC record maintenance process, to simplify the user interface and to share access across departments.

Ask for a demonstration today!

Enterprise display

Switch and Patch Panel Ports in Closet View

Work area indicated in graphic view.



AMPTRAC Analyzers

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Front with Included Accessories



Back

The AMPTRAC Connectivity Management System Analyzer discovers connects/disconnects and communicates the port ID information in real-time to the AMPTRAC database software over a TCP-IP connection. When a patch cord is inserted or removed from a port, the AMPTRAC sensory circuit immediately notifies the database software to update and document the change in connectivity. This provides network administrators responsible for small to enterprise wide multi-site networks, with vital time saving up to-the minute information about the status of their network from the hardware layer up. Any change in connectivity can be checked and authorization verified, and if appropriate, action taken if the action is unauthorized.

- Universal analyzer design
 - Analyzer can be configured as a master or slave
 - Any unit can directly communicate to database server or through another analyzer
 - Virtually unlimited in number of ports/drops which can be monitored
- Highly flexible design and implementation allowing for use in office buildings, data centers and remote/branch offices
- Analyzer sold with license to iTRACS IM software (see pages 12 and 13 of this chapter for description of software)
- Available in 336-port and 168-port versions:
 - Both use 1U of rack space
 - Positive, keyed and reliable DB25 connection for I/O cables
 - Shallow depth at 6.25" (160 mm)
 - Suitable for shelf or 19" rack or cabinet mounting
 - Large 4 line LCD display providing interactive communications with the database
 - Supports connection of PDA, electronic tablet or computer to analyzer via Ethernet port
- Three 10/100BASE-Tx Ethernet ports provided (1 in front, 2 in rear) to provide connection to LAN and server as well as allow analyzer to communicate via another analyzer
- Use of latest and current circuitry design
- Little heat generation — no concerns over heat management in rack or cabinet

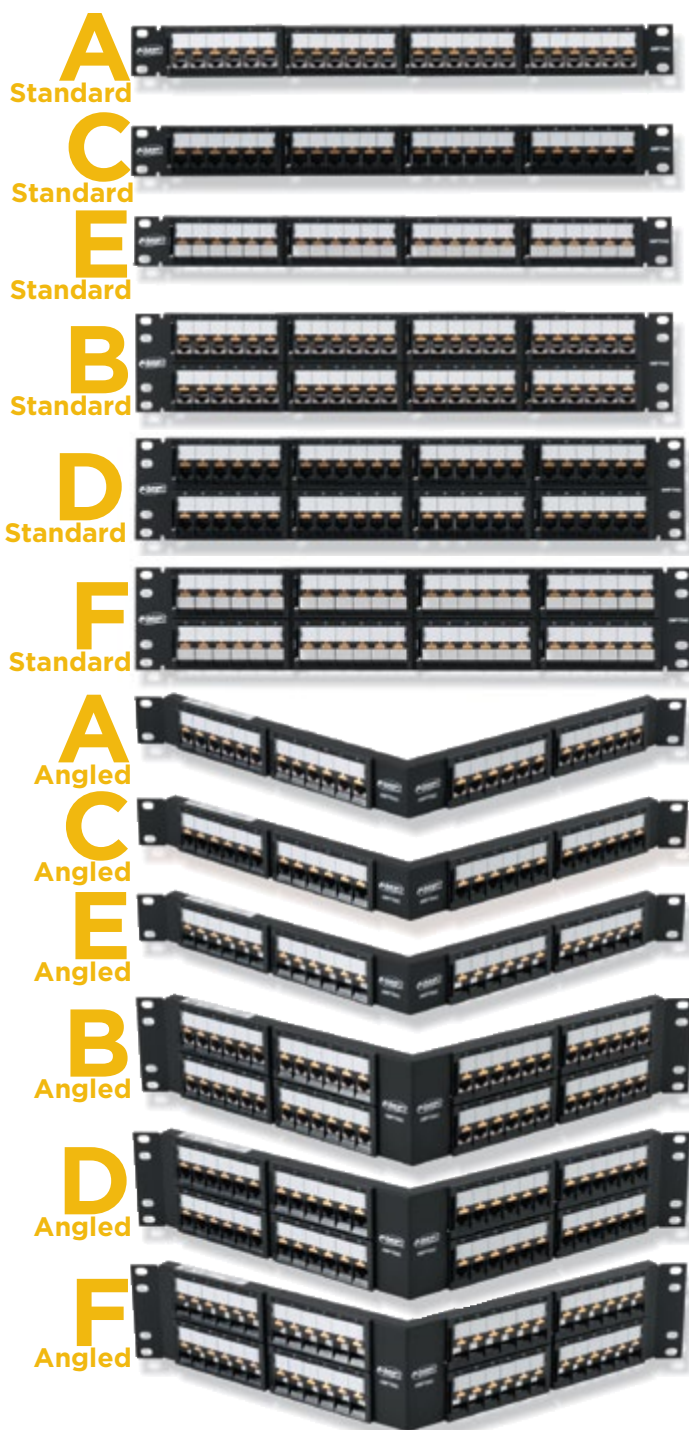
Enhancements

- AMPTRAC Analyzer provides work order information on the LCD screen
- Provides a "good or bad" tone from analyzer based on work order information
- Generates remedial work actions for repair of unauthorized changes
- Supports character based language

Description	Ports Monitored	Part Number
Analyzer, US Power Cord with iTRACS IM Software and 1 Year Service Level Agreement	336	3-1591309-1
	168	4-1591309-1
Extended 3-Year Analyzer Warranty	-	9-1591306-0

Note: A complete channel connection to a work area outlet passes through two monitored ports, the network switch and the patch panel. Therefore, each active channel monitored requires two Analyzer ports.

AMPTRAC Twisted Pair Patch Panels



- Incorporates integrated solid contacts for enhanced protection, appearance, and reliability
- I/O cable connection made via 110 IDC punch down in the rear of patch panel, minimizing pre-planning and allowing for cables to be cut to length (1435844) or with 110 plug and play cable assembly (1933152) (see page 10)
- Cost-effective solution for AMPTRAC Connectivity Management System ready solution - install AMPTRAC patch panels now and analyzer, I/O cables, and software later
- Available in straight versions as well as angled versions for improved cable and space management
- Uses AMP NETCONNECT high-performance AMP-TWIST shielded 6A and SL Series Cat 6 UTP modular jacks
- AMP-TWIST shielded 6A modular jacks meet or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class EA up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- AMP-TWIST shielded 6A modular jacks meet or exceed all requirements for IEEE 802.3an 10 Gigabit Ethernet
- XG Cat 6A and Cat 6 patch panels come unloaded with modular jacks bagged separately for field termination with SL Series modular jack termination tool P/N: 172150 (see Chapter 22)
- SL Series multimedia patch panels come unloaded and accept SL Series jacks for custom configurations
- For compatible cable management products, see Chapter 15

13

Description	Port Count	Height - Rack Units (Inches)	Figure	Footprint	
				Standard	Angled
XG Cat 6A (Shielded)	24	1U (1.75)	A	1933331-1	1933333-1
	48	2U (3.50)	B	1933332-1	1933334-1
Category 6 (Unshielded)	24	1U (1.75)	C	1933327-1	1933329-1
	48	2U (3.50)	D	1933328-1	1933330-1
SL Series Multimedia (without jacks)*	24	1U (1.75)	E	1933323-1	1933325-1
	48	2U (3.50)	F	1933324-1	1933326-1

NOTE: Previous versions of AMPTRAC SL Patch Panels require I/O cable 1499656-X instead of new version 1933152-X.

*NOTE: SL Series multimedia panels do not accept dust-covered jacks

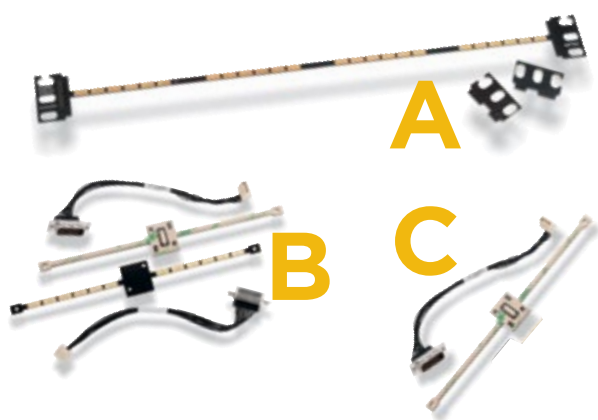
- High-performance copper cabling solution
- High-density, small form factor connectivity
- Factory terminated and tested
- Modular, pluggable design
- 4-Pair MRJ21 patch panels support applications which use four or fewer pairs including 10BASE-T, 100BASE-T and 1000BASE-T
- 2-Pair MRJ21 patch panels support applications which use two or fewer pairs including 10BASE-T, and 100BASE-T
- Utilizes HD22 interface for AMPTRAC I/O cable (1499507) (see page 10)
- For compatible cable management products, see Chapter 15



Footprint	RJ-45 Ports	MRJ21 Connectors	Per Port Wiring (Applications)	Figure	Part Number
Standard	24	4	4-Pair (10/100/1000BASE-T)	A	1777029-2
	48	4	2-Pair (10/100BASE-T)	B	1777042-1
		8	4-Pair (10/100/1000BASE-T)	C	1777041-1
Angled	48	8	4-Pair (10/100/1000BASE-T)	D	1777053-1

AMPTRAC Patch Panel Retrofit Kits

13

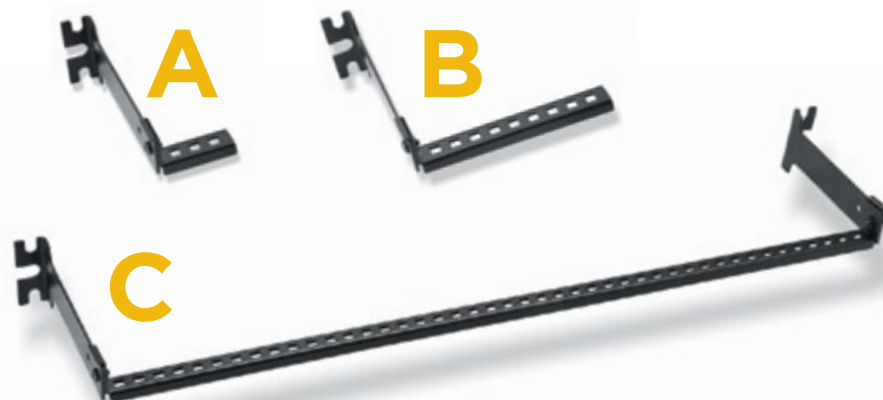


- Kits are designed to retrofit the AMPTRAC Connectivity Management System to existing installations of AMP NETCONNECT SL Series standard unshielded, 110Connect patch panels, or angled and standard MRJ21 patch panels
- SL Series and 110Connect kits contain material to retrofit 24 ports; two kits are required for a 48-port patch panel
- MRJ21 kits contain materials to retrofit 24- or 48-port patch panels as listed



For Use With	Fitted Ports	I/O Interface	Figure	Part Number
110Connect (Cat 5 or 5e) Straight Patch Panels	24	2.0 mm AMPMODU	A	1499639-1
SL Series (Cat 5e or 6) Straight Patch Panels	24	2.0 mm AMPMODU	A	1499640-1
MRJ21 Angled Patch Panels	48	HD22	B	1479853-1
MRJ21 Straight Patch Panels	48	HD22	C	1479951-1
	24	HD22	D	1479894-1

AMPTRAC I/O Cable Management Brackets

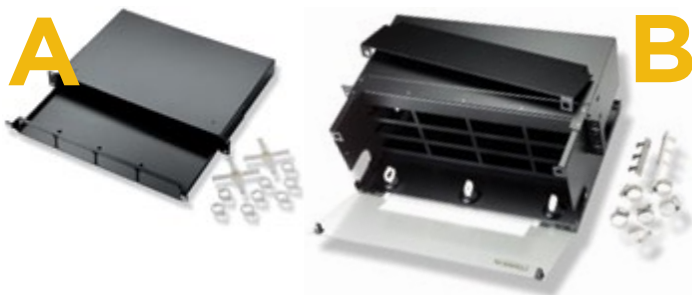


- Universal brackets provide support for I/O cable assemblies
- Adjustable
- Utilize existing patch panel mounting hardware

Description	Width	Figure	Part Number
Universal Bracket	40 mm	A	1499659-1
	100 mm	B	1499659-2
	448 mm	C	1499659-3

AMPTRAC Optical Fiber Patch Panels and Accessories

13



- Available in XG (850 nm LO 50 μ m) multimode (OM3) and single-mode
- Support for field termination with interface module or preterminated use with MPO cassettes
- AMPTRAC LC duplex systems use modified fiber enclosures listed below
- Duplex LC AMPTRAC interface modules are not included with 1933443 or 1435593 enclosures
- AMPTRAC XG 50 μ m (OM4) MPO cassettes also available
- AMPTRAC optical fiber patch panels only accept AMPTRAC duplex LC modules and cassettes listed below

Description	Type	Maximum AMPTRAC Module/AMPTRAC Cassette Capacity	Maximum Fiber/Duplex Port Capacity	Figure	Part Number
AMPTRAC Optical Fiber Patch Panels	1U Drawer	4 of: 1933420, 1499647 or 1499649 (each sold separately)	48-fibers/24 duplex ports	A	1933443-1
	4U Enclosure	12 of: 1933420, 1499647 or 1499649 (each sold separately)	144-fibers/72 duplex ports	B	1435593-2

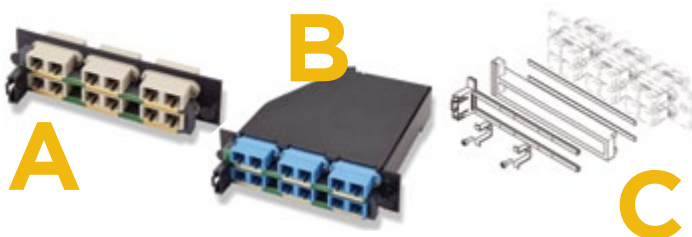


Connector Type	Description	Fiber Count	Duplex Port Count	AMPTRAC I/O Interface	Fiber Type	Figure	Part Number
Duplex LC	AMPTRAC Interface Modules†	12-Fiber	6-Port†	IDC or 110 Plug & Play (1435844/1933152)	XG OM3 50 μ m	C	1933420-2
					Single-mode		1933420-3
	AMPTRAC MPO Cassettes†	12-Fiber	6-Port†	6-Position Mod Plug (RJ-11) (1499684)	XG OM3 50 μ m	D	1499647-2
					Single-mode		1499649-2

†NOTE: AMPTRAC duplex LC require use of above drawer (1933443) or enclosure (1435593).

†NOTE: Adapters inserts included

AMPTRAC Optical Fiber Adapter Plates, Cassettes and Accessories for Optical Fiber Enclosures



- Available in XG OM3 (850 nm LO 50 μ m) multimode and single-mode
- Support for field termination with adapter plate or preterminated use with MPO cassettes
- AMPTRAC duplex SC adapter plates and MPO cassettes (Figures A and B) use standard AMP NETCONNECT enclosures in chapter 15

Description	Connector Type	Fiber Count	Duplex Port Count	AMPTRAC I/O Interface	Fiber Type	Figure	Part Number
AMPTRAC Snap-in Adapter Plates	Duplex SC	12-Fiber	6-Ports	6-Position 2.54 MTE (1499685)	Multimode	A	1435657-1
					Single-mode		1435657-2
AMPTRAC MPO Cassettes	Duplex SC	12-Fiber	6-Ports	6-Position 2.54 MTE (1499685)	XG OM3 50 μ m		1435688-2
					Single-mode	B	1435689-2
AMPTRAC Snap-in Adapter Plate Retrofit Kit	For Adapter Plate 559596			6-Position 2.54 MTE (1499685)	—	C	1435685-1

Note: AMPTRAC Duplex SC Snap-in Adapter Plate and MPO Cassettes use standard fiber enclosures in Chapter 15

AMPTRAC LAN Electronics Sensor Strips



- Sensor strips are readily available for a number of LAN electronic equipment types
- All sensor strips are Printed Circuit Board (PCB) with 2.0 mm AMPMODU connector.
- Custom sensor strips can be designed to work with most LAN electronic equipment. For assistance, call AMP NETCONNECT customer service at 1-800-553-0938
- Equipment manufacturer, model number, and model revision are required in determining the selection of the proper sensor strip
- Sensor strips contain an adhesive backing for easy installation

13

	Description of Equipment	# of Ports	# Ports per Group	# of Port Groups	Part Number
Twisted Pair Equipment	AMPNETCONNECT 50-port Telephone Patch Panel	50	50	1	1435954-1
	Nortel Baystack 470-48T Ethernet Switch	48	16	3	1435939-1
	CISCO 4000 and 6000 Blades (48-Port)	48	12	4	1499651-1
	Nortel Baystack 5520 Ethernet Routing Switch	48	12	4	1499660-1
	CISCO WS-3750-48 and WS-C2960G-48 Switches	48	16	3	1499798-1
	AMP NETCONNECT 48-port 1U Patch Panel (1933458-1)	48	12	4	1499970-1
	Alcatel Omni OS6800-48L Switch	48	12	4	2111101-1
	CISCO WS-C2950SX-24/26 Switch	26	8	3	1435827-1
	CISCO 4000 and 6000 Blades (48-Port); Nortel 5520-24T Ethernet Switch	24	12	2	1435346-1
	CISCO WS-C2950-48 and C3560-48 Switch; Nortel 5520-24T Switch	24	16-8	2	1435346-4
	CISCO 3500-24 Switch	24	12	2	1435346-5
	Nortel Baystack 450-24T Ethernet Switch	24	12	2	1435933-1
	Alcatel 6600-24 Switch	24	12	2	1777005-1
	Nortel Passport 8648 Ethernet Switch	24	16-8	2	1777014-1
	Extreme Summitt 400 Switch	24	8	3	1933067-1
	Tyco Electronics 24-port Switch (1591099-x)	24	8	3	1933184-1
	CISCO 48-port Blades (3 groups of 16)	24	16-8	2	1933228-1
	CISCO WS-3560-24PS Switch	24	12	2	1933430-1
	Generic 24-port; Rigid Flex (6 over 6)	24	12	2	1933737-1
	CISCO 4948 Switch	24	16-8	2	1933850-1
	CISCO WS_C2960-24PC Switch; HP Procurve J8720A Switch	24	12	2	1933899-1
	Extreme Summitt 481 (1433) Switch	16	8	2	1435927-1
	Exterasys Switches	16	16	1	1499759-1
	Exterasys 1H-16TX Module	16	16	1	1933053-1
	Generic 16-port; Rigid Flex (8 over 8)	16	16	1	2111168-1
	Extreme Summitt 1i, 5i and Alpine 3808 Switches	12	X	X	1435952-1
	Generic 12-port; Rigid Flex (6 over 6)	12	12	1	1777019-1
	CISCO WS-3750G-24S Switch	12	12	1	1499800-1
	CISCO 2960-24TC and 2960-48-TC Switches	12	12	1	1933241-1
	HP Procurve J4111A Switch	8	8	1	1933098-1
Optical Fiber Equipment	CISCO 48 and 24-port LC Blade X6748-SFP)	48	4	12	1933361-1
	CISCO 3750-24FS (MTRJ) Switch	24	24	1	2111149-1
	CISCO 24-port MT-RJ Blade (X6324-100-FX)	24	24	1	1435937-1
	CISCO 16-port Duplex SC Blade	16	8	2	1435820-1
	CISCO 12-port LC Switch (S-3750-12S)	12	4	3	1499795-1
	CISCO 8-port LC Blade (SUP32-GE-3B)	8	8	1	1933358-1
	CISCO 4-port LC Uplink	4	4	1	1499794-1
	Generic 2-port, Duplex SC Uplink	2	2	1	1933875-1
	CISCO 2-port LC Uplink (2950)	2	2	1	1933180-1
	CISCO 2-port LC Uplink (3750)	2	2	1	1499799-1
	Alcatel 2-port LC Uplink (6648)	2	2	1	1479889-1 1479889-2
	CISCO 2-port Uplink (2950)	2	2	1	1435950-1
	CISCO Dual Duplex SC Uplink (3550)	2	2	1	1435818-1

AMPTRAC Twisted Pair Patch Cable Assemblies

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White AMPTRAC Patch Cable Assembly

External Probe



- Meets or exceeds Category 6 performance specifications
- Cat 6A shielded assembly meets or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class EA up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- Cat 6A shielded assembly meets or exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet
- Patch cable assemblies contain 9th conductor that is connected to external probe molded into the modular plug boot
- Backward compatibility permits assemblies to support new or existing Category 5e systems
- External probe makes contact with sensor pad on the sensor strip and/or patch panel sensor contact
- Off-center probe designed to accommodate stacked-jack LAN switch configurations
- Non-plenum jacketing, CMR rated
- Color matched over-molded snagless boots
- Crossover patch cable assemblies are unshielded with red cable jacketing and black over-molded boots

AMPTRAC Category 6, Unshielded Patch Cable Assemblies

Wiring	Jacket Boot		Length							
	Color	Color	3 ft [0.91 m]	5 ft [1.52 m]	7 ft [2.13 m]	10 ft [3.04 m]	14 ft [4.26 m]	16 ft [4.87 m]	25 ft [7.62 m]	
Universal	Black	Black	1435864-3	1435864-5	1435864-7	1-1435864-0	1-1435864-4	1-1435864-6	2-1435864-5	
	Gray	Gray	1435835-3	1435835-5	1435835-7	1-1435835-0	1-1435835-4	1-1435835-6	2-1435835-5	
	Blue	Blue	1435861-3	1435861-5	1435861-7	1-1435861-0	1-1435861-4	1-1435861-6	2-1435861-5	
	Green	Green	1435860-3	1435860-5	1435860-7	1-1435860-0	1-1435860-4	1-1435860-6	2-1435860-5	
	Red	Red	1435862-3	1435862-5	1435862-7	1-1435862-0	1-1435862-4	1-1435862-6	2-1435862-5	
	White	White	1435834-3	1435834-5	1435834-7	1-1435834-0	1-1435834-4	1-1435834-6	2-1435834-5	
	Yellow	Yellow	1435863-3	1435863-5	1435863-7	1-1435863-0	1-1435863-4	1-1435863-6	2-1435863-5	
	Orange	Orange	1435918-3	1435918-5	1435918-7	1-1435918-0	1-1435918-4	1-1435918-6	2-1435918-5	
Crossover	Violet	Violet	1435919-3	1435919-5	1435919-7	1-1435919-0	1-1435919-4	1-1435919-6	2-1435919-5	
	Red	Black	1435953-3	1435953-5	1435953-7	1-1435953-0	1-1435953-4	1-1435953-6	2-1435953-5	

AMPTRAC XG Category 6A, Shielded Patch Cable Assemblies

Wiring	Jacket Boot		Length							
	Color	Color	3 ft [0.91 m]	5 ft [1.52 m]	7 ft [2.13 m]	10 ft [3.04 m]	14 ft [4.26 m]	16 ft [4.87 m]	25 ft [7.62 m]	
Universal	White	White	1499740-3	1499740-5	1499740-7	1-1499740-0	1-1499740-4	1-1499740-6	2-1499740-5	

AMPTRAC Optical Fiber Patch Cable Assemblies



Duplex SC



Duplex LC

- Meets or exceeds optical performance specifications for XG OM3 (850 nm LO 50 μ m) multimode and single-mode
- Duplex SC and duplex LC assemblies available
- Patch cable assemblies contain copper conductor that is connected to external probe
- External probe makes contact with sensor pad on the sensor strip and/or patch panel sensor contact
- One wire/one probe design to monitor duplex fiber port as a single connection
- OFCR riser rated and listed cable
- Cable is a mini-tri-zip design for flexibility and small size

13

Connector End 1	Connector End 2	Fiber Type	Length					
			1 m [3.28 ft]	2 m [6.56 ft]	3 m [9.84 ft]	5 m [16.40 ft]	7 m [22.96 ft]	10 m [32.80 ft]
Duplex SC	Duplex SC	XG OM3 50 μ m	1435725-1	1435725-2	1435725-3	1435725-5	1435725-7	1-1435725-0
		Single-mode	1435726-1	1435726-2	1435726-3	1435726-5	1435726-7	1-1435726-0
Duplex SC	Duplex LC	XG OM3 50 μ m	1435796-1	1435796-2	1435796-3	1435796-5	1435796-7	1-1435796-0
		Single-mode	1435797-1	1435797-2	1435797-3	1435797-5	1435797-7	1-1435797-0
Duplex LC	Duplex LC	XG OM3 50 μ m	1435790-1	1435790-2	1435790-3	1435790-5	1435790-7	1-1435790-0
		Single-mode	1435791-1	1435791-2	1435791-3	1435791-5	1435791-7	1-1435791-0

NOTE: AMPTRAC XG OM4 50 μ m cable assemblies also available.

AMPTRAC I/O Interface Adapter, DB25 to 2.0 mm AMPMODU Connector

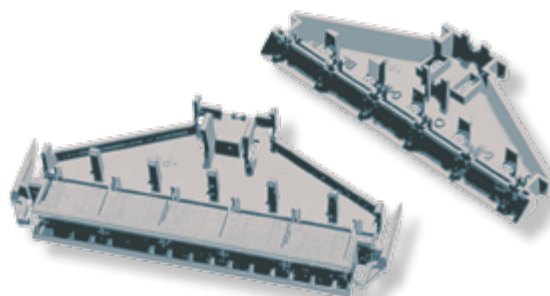


Back Detail
24 Position, 2.0 mm
AMPMODU Connector

- For use with 2.0 mm connectors less than 24 position
- Allows for side-by-side connections of multiple 2.0 mm AMPMODU connectors
- Allows for use of all analyzer ports
- Built-in strain relief and cable management

Description	Part Number
AMPTRAC I/O Interface Adapter, DB25 to 2.0 mm AMPMODU Connector	1499641-1

AMPTRAC I/O Interface, 110 Plug and Play Kit



Assembled Kit

- Used with I/O cable assembly part number 1435844 (use 4 per assembly) for custom length
- Easy to lace and field terminate (no special tools required)
- Built-in latches and orientation features

Description	Part Number
AMPTRAC I/O Interface, 110 Plug and Play Kit	1933151-1

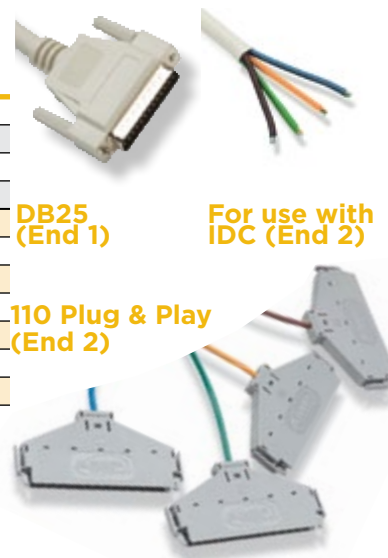
AMPTRAC Analyzer I/O Cable Assemblies

13

- AMPTRAC connectivity management system I/O cable assemblies are available with the following connectors:
 - DB25 connector (on analyzer)
 - 110 Plug and Play connector (on AMPTRAC SL Series patch panels) and duplex LC interface modules
 - HD22 connector (on MRJ21 patch panels)
 - 2.0 mm AMPMODU connector (used with the analyzer DB25 adapter 1499641-1)
 - 2.0 mm AMPMODU connector (on sensor strips)
 - 6-position modular plug (RJ11) (LC duplex MPO cassettes)
 - 6-position 2.54 MTE connector (on duplex SC adapter plates and MPO cassettes)
- All I/O cables come with molded boots on the analyzer connector end
- I/O cable assemblies are non-plenum (CM rated) and UL Listed

AMPTRAC SL Series and AMPTRAC Optical Fiber Patch Panels

Application	Connector End 1	Connector End 2	Conductor Count	Length	Part Number
Cat 6A Shielded Cat 6 Unshielded Duplex LC	DB25 - Analyzer	None - used with IDC	24	7 ft [2.13 m]	1435844-7
				14 ft [4.27 m]	1-1435844-4
				50 ft [15.24 m]	5-1435844-0
				100 ft [30.48 m]	9-1435844-9
		110 Plug & Play	24	4 ft [1.22 m]	1933152-4
				7 ft [2.13 m]	1933152-7
				10 ft [3.05 m]	1-1933152-0
				14 ft [4.27 m]	1-1933152-4
				25 ft [7.62 m]	2-1933152-5
				50 ft [15.24 m]	5-1933152-0
				75 ft [22.86 m]	7-1933152-5
				100 ft [30.48 m]	9-1933152-9



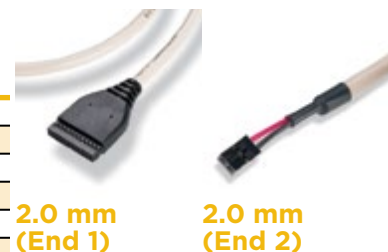
MRJ21 Patch Panels

Application	Connector End 1	Connector End 2	Conductor Count	Length	Part Number
MRJ21 Patch Panels	DB25 - Analyzer	HD22	24	4 ft [1.22 m]	1499507-4
				7 ft [2.13 m]	1499507-7
				10 ft [3.05 m]	1-1499507-0
				14 ft [4.27 m]	1-1499507-4
				25 ft [7.62 m]	2-1499507-5
				50 ft [15.24 m]	5-1499507-0
				75 ft [22.86 m]	7-1499507-5
				100 ft [30.48 m]	9-1499507-9



PCB Sensor

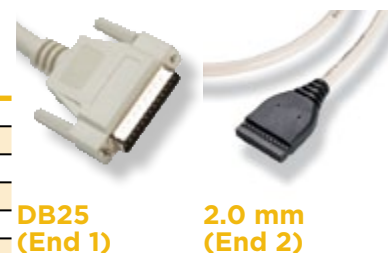
Application	Connector End 1	Connector End 2	Conductor Count	Length	Part Number
LAN Switches	2.0 mm	2.0 mm	2	4 ft [1.22 m]	1499690-4
				7 ft [2.13 m]	1499690-7
				10 ft [3.05 m]	1-1499690-0
				14 ft [4.27 m]	1-1499690-4
				25 ft [7.62 m]	2-1499690-5
				50 ft [15.24 m]	5-1499690-0
				75 ft [22.86 m]	7-1499690-5
				100 ft [30.48 m]	9-1499690-9



AMPTRAC Analyzer I/O Cable Assemblies

PCB Sensor

Application	Connector		Conductor Count	Length	Part Number
	End 1	End 2			
LAN Switches	DB25 - Analyzer	2.0 mm	24	4 ft [1.22 m]	1435845-4
				7 ft [2.13 m]	1435845-7
				10 ft [3.05 m]	1-1435845-0
				14 ft [4.27 m]	1-1435845-4
				25 ft [7.62 m]	2-1435845-5
				50 ft [15.24 m]	5-1435845-0
				75 ft [22.86 m]	7-1435845-5
				100 ft [30.48 m]	9-1435845-9



13

PCB Sensor

Application	Connector		Length	Conductor Count			
	End 1	End 2		6	8	12	16
LAN Switches	2.0 mm*	2.0 mm	4 ft [1.22 m]	1499689-4	1499688-4	1499687-4	1499686-4
			7 ft [2.13 m]	1499689-7	1499688-7	1499687-7	1499686-7
			10 ft [3.05 m]	1-1499689-0	1-1499688-0	1-1499687-0	1-1499686-0
			14 ft [4.27 m]	1-1499689-4	1-1499688-4	1-1499687-4	1-1499686-4
			25 ft [7.62 m]	2-1499689-5	2-1499688-5	2-1499687-5	2-1499686-5
			50 ft [15.24 m]	5-1499689-0	5-1499688-0	5-1499687-0	5-1499686-0
			75 ft [22.86 m]	7-1499689-5	7-1499688-5	7-1499687-5	7-1499686-5
			100 ft [30.48 m]	9-1499689-9	9-1499688-9	9-1499687-9	9-1499686-9



2.0 mm
(End 1 & 2)

*NOTE: Use with DB25 Adapter P/N: 1499641-1 to connect monitored device to AMPTRAC Analyzer.

AMPTRAC LC MPO Cassettes, AMPTRAC LC Duplex Adapter Plates

Application	Connector		Conductor Count	Length	Part Number
	End 1	End 2			
Duplex LC	2.0 mm*	6-Position, RJ11	6	4 ft [1.22 m]	1499684-4
				7 ft [2.13 m]	1499684-7
				10 ft [3.05 m]	1-1499684-0
				14 ft [4.27 m]	1-1499684-4
				25 ft [7.62 m]	2-1499684-5
				50 ft [15.24 m]	5-1499684-0
				75 ft [22.86 m]	7-1499684-5
				100 ft [30.48 m]	9-1499684-9



2.0 mm
(End 1)

RJ11
(End 2)

*NOTE: Use with DB25 Adapter P/N: 1499641-1 to connect monitored device to AMPTRAC Analyzer.

Duplex SC

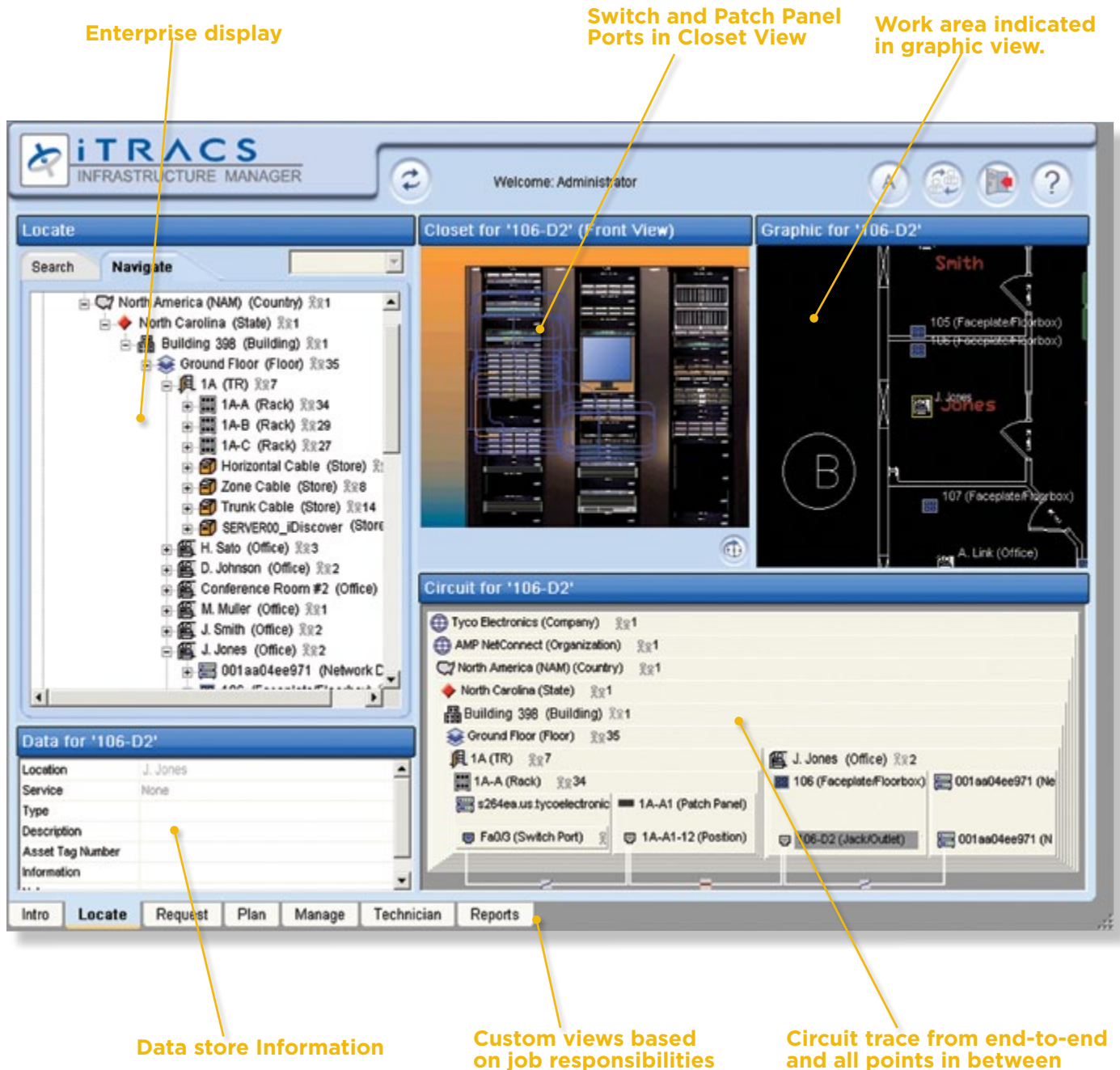
Application	Connector		Conductor Count	Length	Part Number
	End 1	End 2			
Duplex SC Adapter Plates and MPO Cassettes	2.0 mm*	6-Position 2.54 MTE	6	4 ft [1.22 m]	1499685-4
				7 ft [2.13 m]	1499685-7
				10 ft [3.05 m]	1-1499685-0
				14 ft [4.27 m]	1-1499685-4
				25 ft [7.62 m]	2-1499685-5
				50 ft [15.24 m]	5-1499685-0
				75 ft [22.86 m]	7-1499685-5
				100 ft [30.48 m]	9-1499685-9



2.0 mm
(End 1)

2.54 MTE
(End 2)

*NOTE: Use with DB25 Adapter P/N: 1499641-1 to connect monitored device to AMPTRAC Analyzer.



iTRACS IM software has been designed to work with AMP NETCONNECT AMPTRAC Connectivity Management System hardware. Together they create an automated, accurate, real-time physical layer management system. This combined system proactively responds to changes in connectivity and intelligently records your cabling system and its devices with accurate documentation. You reduce costs by eliminating time-consuming manual work order processes. You also maximize your existing network investment by identifying under-utilized assets.

iTRACS® Intelligent Infrastructure Management Software

13

- Real-time monitoring - automates the process of discovering, documenting, monitoring, and managing the physical network's connections and its devices.
- Automatically updates the database - reports authorized or unauthorized changes in real time.
- Self-discover patching - discovers all iTRACS-enabled port connectivity.
- Event logs - whenever the system detects a connectivity change, it automatically creates an entry in an internal comprehensive log.
- Automated work order process - iTRACS Infrastructure Manager software provides a greatly automated work order system, to be shared by the help desk, network/telecom managers and technicians. It is the simplest and most intelligent system available. Each user works from a simple user interface, unique to their task.
- Access rights and privileges are determined by the administrator. Authorized users select proposed moves of workstations, phones, printers or other equipment. Moves can be performed singly or in bulk, as in departmental relocation. The system automatically generates auto-routing, and a step-by-step work order and schedule, which can be accepted or revised by the user. Tasks can be divided and distributed between various supervisors and technicians via email. Work orders can include system diagrams and floor plans.
- When a work order is completed for an iTRACS IM software monitored port, the system record instantly updates, ensuring accurate information. Should an unauthorized change occur, iTRACS IM software can generate a work order to reverse the unwanted action.
- For un-monitored ports, a simple verification by technical staff/management ensures that the work flow automatically updates the iTRACS IM software database.
- The system can also generate comprehensive reports containing all work order details such as the author, status, creation and scheduled dates, and notes.
- Terminal service - iTRACS IM software can be accessed via terminal service therefore allowing full functionality and viewing by remote users.
- Automatic re-synchronization - if a network outage should occur, the iTRACS IM Software database automatically re-synchronizes upon the restoration of power, showing network asset connectivity changes.
- Security Features - iTRACS IM software distinguishes unauthorized changes from authorized ones.
- Alerts - receive a text message via email containing a pre-defined message.
- More detailed reports - iTRACS IM software provides a library of detailed reports of cable, port and asset utilization. These reports are invaluable to network administrators and asset managers.
- Auto-routing - The system automatically generates suggested auto-routing, and a step-by-step work order and schedule, which can be accepted or revised by the user.

IM Enhancements (9.1)

- Supports character based languages as well as Latin based
- Work order communicates with AMPTRAC analyzer LCD
- ODBC read-authorization
- Virtual machine support

Description	Part Number
iTRACS IM Software with One-year Gold Plus Service Agreement	Sold With Analyzer
iTRACS IM Software Concurrent User Pack (5 Additional Users)	1479979-1
iTRACS IM Gold Plus Service Agreement (1 Year Per Port)	1-1479977-1



Mini Multi-User Outlet (MUO)	02
Category 5e Multi-User Outlet (MUO)	02
Consolidation Points for Raised Floor Systems	03
Consolidation Points for Drop Ceiling Systems	04
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Mini Multi-User Outlet (MUO)

14



- Provides a 6-port outlet particularly suited to open office or laboratory environments
- May be used free-hanging or mounted
- Available in Category 5e and Category 6 performance
- Meets TIA and ISO performance requirements
- Universal wiring – one part number may be terminated to T568A or T568B
- Suitable for use with either 4-pair or 25-pair cable
- Kits include housing, connector module and heat shrink tubing
- Replacement labels and clear label covers are available (see Chapter 17)

Description

Category 5e, 6-Port Mini MUO

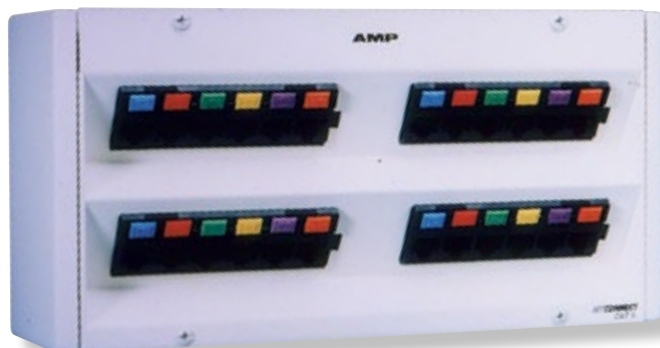
Part Number

1479144-1

Category 6, 6-Port Mini MUO

1375376-1

Category 5e Multi-User Outlet (MUO)



- Attaches to columns, walls or permanent furniture structures
- Connects directly to user communications equipment
- Accommodates surface raceway
- 24-port, Category 5e, 110Connect Jacks with angled cable exit

Description

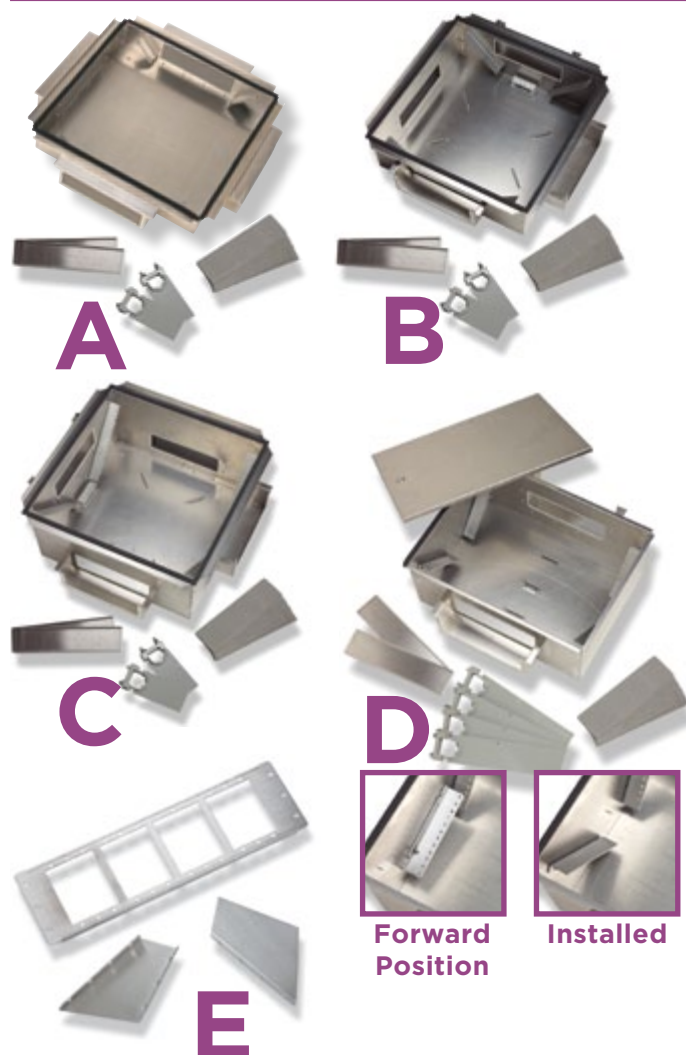
Category 5e Multi-User Outlet

Part Number

406810-1

Consolidation Points for Raised Floor Systems

14



- Designed for use in 2 ft x 2 ft raised floor systems
- Accommodate standard 19 in patch panels and/or cable management panels as listed
- Consolidation points for 2.5 in high raised floor systems are designed to fit low profile raised floors
- Consolidation points for 10 in high raised floor systems are intended for high density applications in data centers, server rooms, etc.
- Consolidation points for 6 – 10 in high raised floor systems feature hinged patch panel mounts which allow easy access to patch panels for moves adds and changes
- Complies with NEC 300-22(c) requirements for use in environmental air spaces
- Allows moves, adds and changes without re-terminating and re-testing cable
- Forms an interconnect between work area cabling and horizontal feeder cables
- Complies with TIA/EIA-568-C and ISO 11801:2002 requirements
- Fiber Support Bar is for use with Consolidation Points 1479359, 1479360, and 1479297
- Fiber Support Bar accepts Fiber Snap-in Adapter Plates or MPO Cassettes
- Security consolidation point includes lockable cover and fits under floor tiles allowing access from a single tile

Description	For Use With	Total Capacity	Figure	Part Number
Consolidation Points for Raised Floors	2.5 in Raised Floors	2U (1U + 1U)		1479158-1
	4 in Raised Floors	2U or Angled MRJ21 Patch Panels		1479956-1
	6 in Raised Floors	4U (2U + 2U)	A	1479042-1
	7 in Raised Floors	8U (4U + 4U)	B	1479359-1
	10 in Raised Floors	12U (6U + 6U)	C	1479360-1
Security Consolidation Point for Raised Floors	8 in Raised Floors	8U (4U + 4U)	D	1479297-1
Fiber Support Bar Kit	1479359, 1479360, 1479040, and 1479297	12 Adapter Plates or MPO Cassettes	E	1479326-1

Consolidation Points for Drop Ceiling Systems

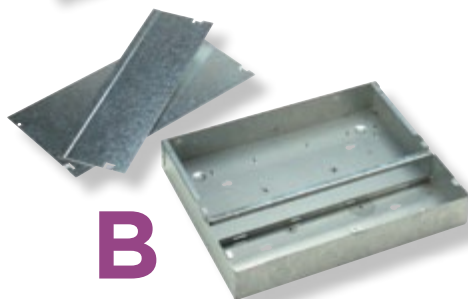
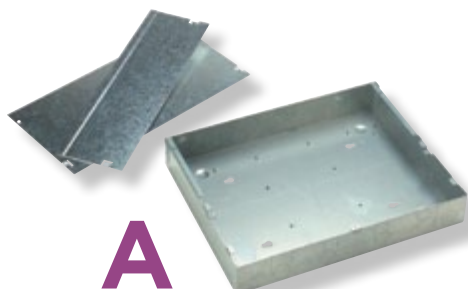
14



- Designed for use in 2 ft x 2 ft ceiling tile grid systems
- Passive consolidation points accommodate standard 19-inch patch panels, cable management panels or 300-Pair cross-connects as listed
- Active consolidation points accommodate 2U of active LAN equipment in addition to same passive components as the passive consolidation point 1479040
- Complies with NEC 300-22(c) requirements for use in environmental air spaces
- Allows moves, adds and changes without re-terminating and re-testing cable
- Forms an interconnect between work area cabling and horizontal feeder cables
- Complies with TIA/EIA-568-C and ISO 11801:2002 requirements

Description	Total Capacity	Figure	Part Number
Passive Consolidation Points	5U (2U+1U+2U) for Passive Equipment	A	1479040-1
	Two 300-Pair Cross-Connect Blocks Without Legs	B	1479041-1
Active Consolidation Point	5U (2U+1U+2U) for Passive equipment, 2U (2U) for Active equipment	C	1479039-1

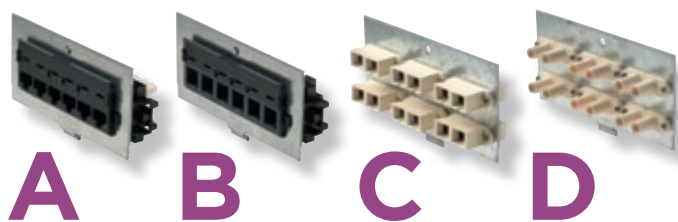
Modular and Cross-Connect Consolidation Points



- Designed for use in both raised floor and drop ceiling systems
- Allows moves, adds and changes without re-terminating and retesting cable
- Forms an interconnect between work area cabling and horizontal feeder cables
- Complies with TIA/EIA-568-C and ISO 11801 requirements
- Cross-connect consolidation points accommodate two 100-Pair 110Connect XC Wiring Blocks without legs
- 24-Port modular consolidation points accommodate four connector modules
- 48-port modular consolidation points accommodate eight connector modules
- Complies with NEC 300-22 (c) requirements for use in environmental air spaces
- Compliant with UL 2043 for use in environmental air spaces
- UL listed: file number E81956

Description	Maximum Capacity	Accommodates	Figure	Part Number
Modular Consolidation Points	24-Port	Four Consolidation Point Modules	A	406771-1
	48-Port	Six Consolidation Point Modules		1479322-1
Cross-connect Consolidation Point	200-Pair	Two 100-Pair 110Connect XC Wiring Blocks	B	406771-2

Modular Consolidation Point Modules



- Comply with TIA/EIA-568-C and ISO 11801 requirements
- Multimedia module accepts up to six SL Series jacks, MT-RJ outlet jacks or SL Series inserts enabling custom configurations
- SL Series Modules feature individually replaceable ports
- MT-RJ module holds up to six MT-RJ patch panel jacks (sold separately)
- SC and ST Modules suitable for multimode connectors

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Description	Port Count	Figure	Part Number
Category 6 (Jacks Included)	6-Port	A	1375367-1
Category 5e (Jacks Included)	6-Port		406772-1
Multimedia, Unshielded (Connectivity Not Included)	6-Port		1479696-1
Multimedia, Shielded (Connectivity Not Included)	6-Port		1933895-1
MT-RJ (MT-RJ Patch Panel Jacks Not Included)	6-Ports/12-Fibers	B	1375093-1
SC Duplex (Includes Couplers)	6-Ports/12-Fibers	C	406788-1
ST (includes Dual Couplers)	6-Ports/12-Fibers	D	406790-1

Consolidation Point Transition Cable Assemblies



- Form connections between work area and consolidation point
- Factory-assembled and tested
- Save time and money on moves, adds and changes
- Lead-Free (no heavy metals)
- Gray Cable Jacket

End A	End B	Figure	Length	Riser (CMR) T568A	Riser (CMR) T568B	Plenum (CMP) T568A	Plenum (CMP) T568B
Category 6A Shielded Modular Plug	Un-terminated	A	40 ft	4-1933920-0	4-1933921-0	4-1499783-0	4-1933335-0
			50 ft	5-1933920-0	5-1933921-0	5-1499783-0	5-1933335-0
			60 ft	6-1933920-0	6-1933921-0	6-1499783-0	6-1933335-0
			70 ft	7-1933920-0	7-1933921-0	7-1499783-0	7-1933335-0
			80 ft	8-1933920-0	8-1933921-0	8-1499783-0	8-1933335-0
Category 6 Modular Plug	Un-terminated	A	90 ft	9-1933920-0	9-1933921-0	9-1499783-0	9-1933335-0
			20 ft	1499056-1	1499056-5	1499057-1	1499057-5
			30 ft	1499056-2	1499056-6	1499057-2	1499057-6
			40 ft	1499056-3	1499056-7	1499057-3	1499057-7
Category 5e Modular Plug	SL Series Category 5e Modular Jack	A	50 ft	1499056-4	1499056-8	1499057-4	1499057-8
			20 ft	219172-1	219173-1	219174-1	219175-1
			30 ft	219172-2	219173-2	219174-2	219175-2
			40 ft	219172-3	219173-3	219174-3	219175-3
			50 ft	219172-4	219173-4	219174-4	219175-4

50/125 µm OM1 Multimode MT-RJ Transition Point Cable Assemblies



- Form connections between work area and consolidation point
- Factory-assembled and tested
- Save time and money on moves, adds and changes
- Riser (OFNR) rated
- Orange Jacketing

Connector End 1	End 2	Length 10 ft	20 ft	30 ft	40 ft	50 ft
MT-RJ Plug	MT-RJ Jack (with Right Angle Boot)	6457240-1	6457240-2	6457240-3	6457240-4	6457240-5

Easy Access Zone (EAZ) Enclosure

14

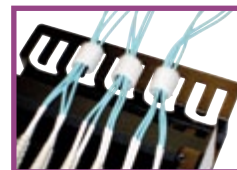
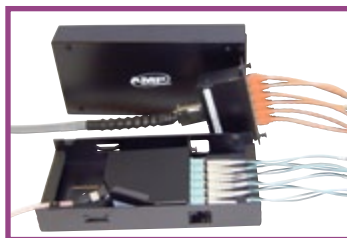


A



B

- Very low profile
- Supports a single adapter plate, MRJ21 cassette, or MPO cassette
- Gasketed entry to reduce dust intrusion
- Separate mounting/strain relief plate
- Not plenum rated
- Captive fasteners
- Economical
- Can be magnet mounted
- Robust construction
- Tamper resistant version available
- Internal bonding lug
- Nominal dimensions: 1.75" (4.5cm) H x 11" (28cm) D x 5.4" (14cm) W



Description		Figure	Part Number
Easy Access Zone Enclosure	with Phillips Head 1/4 Turn Fasteners	A	1777215-1
	with Tamper-proof Cover Fasteners		1777215-2
Strain Relief Bracket for Easy Access Zone Enclosure		B	1777224-1

Wall/Furniture Mounting Bracket

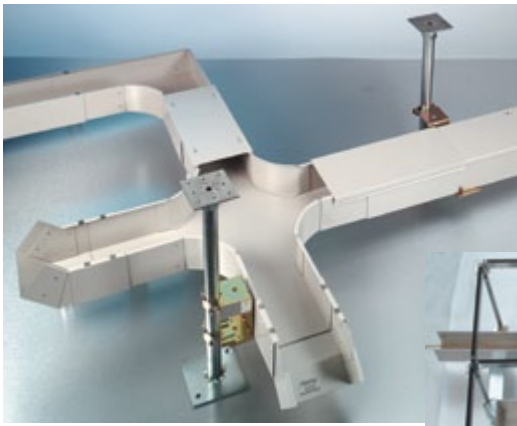


Shown with optional
cable ring

- Accepts up to two snap-in adapter plates or two MPO cassettes (sold separately)
- Mounting holes for fastening to TIA rack, wall, or furniture
- Bracket Color: Black
- Compatible with magnetic mounts
- Optional cable management ring is not compatible with cassettes

Description	Part Number
Wall/Furniture Mounting Bracket	1777126-1
Optional Cable Management Ring	1206146-1

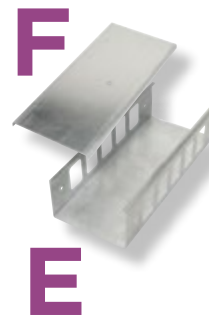
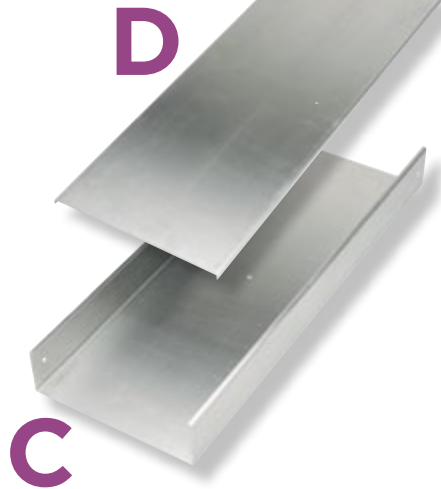
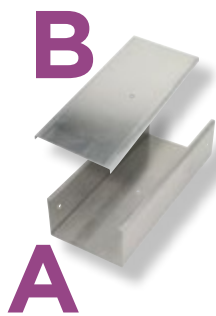
Cabletray Raceway System



- Aluminum construction (unpainted)
- No cutting or bending required
- No specialized tools required
- No adhesives required
- No fasteners required for snap-on covers
- Solid base design protects cables from sagging
- User-defined layout (assistance available)
- UL approved (UL5)
- All turns and bends use a 2" minimum bend radius
- Telescoping connecting sections allow for complete adjustability
- Mounting techniques include support brackets for mounting:
 - directly to floor
 - to raised floor pedestals
 - to walls or ceiling hung
- IBM qualified and approved

14

Cabletray Raceway and Cover

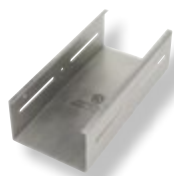


Optional
Radiused
Fiber Guides

Description	Tray Height	Width	Component	Figure	Length			
					1 ft	2 ft	4 ft	6 ft
Cable Tray Raceway	3 in	5 in	Tray	A	1639335-1	1639335-2	1639335-3	1639335-4
			Cover	B	1639336-1	1639336-2	1639336-3	1639336-4
		10 in	Tray		1639338-1	1639338-2	1639338-3	1639338-4
			Cover		1639339-1	1639339-2	1639339-3	1639339-4
		18 in	Tray	C	1639340-1	1639340-2	1639340-3	1639340-4
			Cover	D	1639341-1	1639341-2	1639341-3	1639341-4
Fiber Tray Vented Raceway	3 in	5 in	Tray	E	1639337-1	1639337-2	1639337-3	1639337-4
			Cover	F	1639336-1	1639336-2	1639336-3	1639336-4

Connecting Sections

14



A



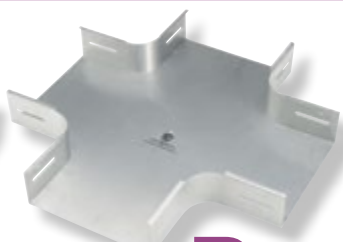
B

Description	Width	Component	Figure	Length		
				6 in	14 in	26 in
Connecting Section	5 in	Fitting	A	1639342-5	1639342-6	1639342-7
		Cover		1639343-5	1639343-6	1639343-7
	10 in	Fitting	B	1639344-5	1639344-6	1639344-7
		Cover		1639345-5	1639345-6	1639345-7
	18 in	Fitting		1639346-5	1639346-6	1639346-7
		Cover		1639347-5	1639347-6	1639347-7

Horizontal Fittings T, Cross, and L (900, 450, 150) Sections and Covers



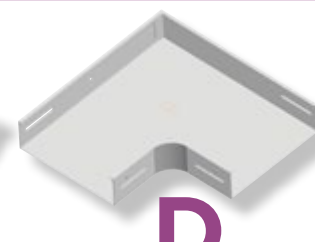
A



B



C



D

Description	Component	Figure	Width		
			5 in	10 in	18 in
T Section	Fitting	A	1639348-1	1639348-2	1639348-3
	Cover		1639349-1	1639349-2	1639349-3
Cross Section	Fitting	B	1639350-1	1639350-2	1639350-3
	Cover		1639351-1	1639351-2	1639351-3
L Section	90°	Fitting	1639352-1	1639352-2	1639352-3
		Cover	1639353-1	1639353-2	1639353-3
	45°	Fitting	1639362-1	1639362-2	1639362-3
		Cover	1639363-1	1639363-2	1639363-3
	15°	Fitting	1639364-1	1639364-2	1639364-3
		Cover	1639365-1	1639365-2	1639365-3

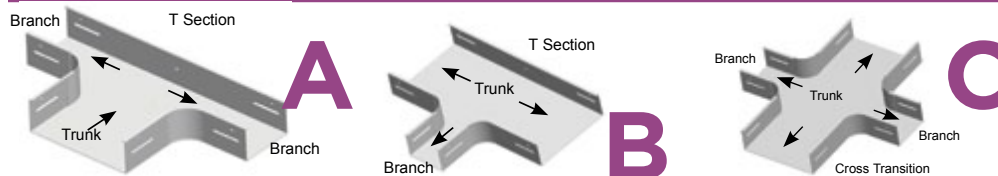
Vertical Fittings

14



Description	Component	Figure	Width		
			5 in	10 in	18 in
Vertical 90° Up	Fitting	A	1639354-1	1639354-2	1639354-3
	Cover		1639355-1	1639355-2	1639355-3
Vertical 45° Up	Fitting	B	1639356-1	1639356-2	1639356-3
	Cover		1639357-1	1639357-2	1639357-3
Vertical 90° Down	Fitting	B	1639358-1	1639358-2	1639358-3
	Cover		1639359-1	1639359-2	1639359-3
Vertical 45° Down	Fitting	B	1639360-1	1639360-2	1639360-3
	Cover		1639361-1	1639361-2	1639361-3

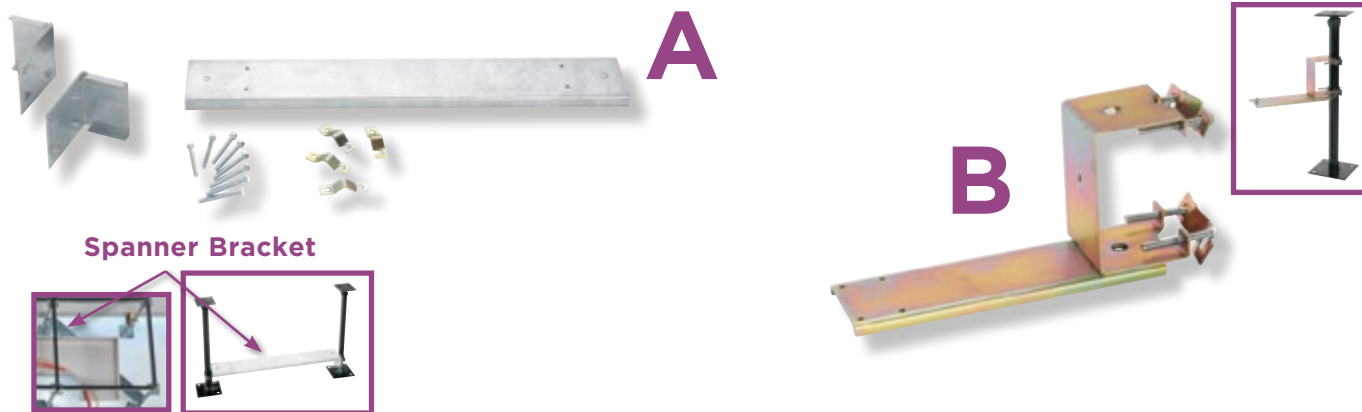
Cabletray Transitions



Description	From	To	Figure	Part Number	
				Fitting	Cover
T Section	10" Trunk	Two 5" Branches	A	1639348-5	1639349-5
		One 5" Branch	B	1639348-4	1639349-4
	18" Trunk	Two 10" Branches	A	1639348-6	1639349-6
		One 10" Branch	B	1639348-7	1639349-7
Cross Section	10" Trunk	Two 5" Branches	C	1639350-4	1639351-4
	18" Trunk	Two 10" Branches	C	1639350-6	1639351-6
		Two 5" Branches	C	1639350-7	1639351-7
Straight Section - Right	5"	10"		1639370-5	1639371-5
Straight Section - Left	5"	10"		1639372-5	1639373-5
	18"	10"		1639374-6	1639375-6

Mounting Components

14



Description		Figure	Width		
			5 in	24 in	34 in
Spanner Bracket	Standard	A	–	1639379-1	1639379-2
Pedestal Bracket	–	B	1639380-1	–	–

Cabletray Accessories

Description	Width		
	5 in	10 in	18 in
Cable Separator	1639376-1	1639376-2	1639376-3
Rack Drop	1639377-1	–	–
Vertical Drop	1639378-1	1639378-2	1639378-3
Vertical Drop Cover	1639343-6	1639345-6	1639347-6
Slack Tray	1639367-1	–	–
Slack Tray Cover	1639368-1	–	–
End Cap	1639366-1	1639366-2	1639366-3
End Cap Cover	1639343-5	1639345-5	1639347-5

Hardware Components

Description	Package Qty.	Part Number
Grounding Wires with Hardware	10	9-1201816-2
Fastening Hardware	100	7-1201816-0
Fastening Clips	100	4-1199891-8



15



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Hinged Wall Brackets for 19-Inch Panels

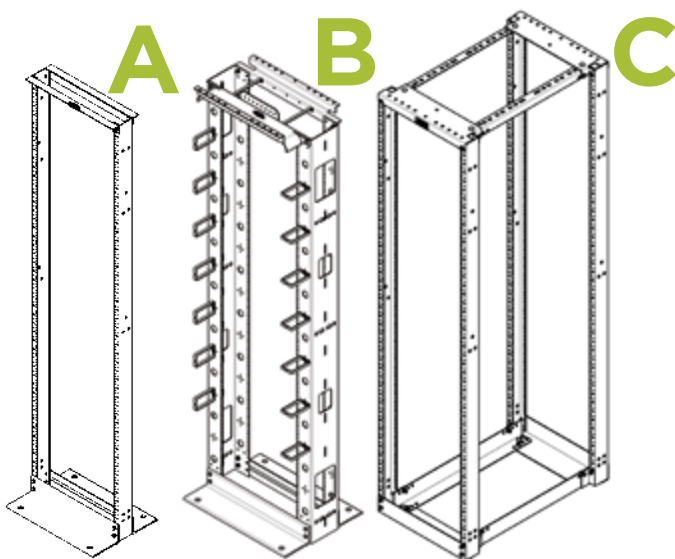
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- Can be installed with hinges on either side for easier access
- Provided with cable tie laces to aid in dressing cables, have multiple threaded holes allowing more than one panel to be mounted on a bracket, and rear entry cable holes.

Panel Height	Depth	Figure	Part Numbers
1U (1.75 in)	6 inches		558266-1
2U (3.50 in)	6 inches	A	558267-1
3U (5.25 in)	6 inches		558268-1
4U (7.00 in)	6 inches		558269-1
6U (10.50 in)	6 inches		2111279-1

Equipment Racks



- Available in two and four post designs
- Made of 6061-T6 aluminum alloy
- Flat black powder coat finish
- Features pre-tapped #12-24 mounting holes
- Shipped unassembled with all components and instructions required to assemble a fully functional rack.
- Feature double sided, EIA universal rails with 0.625 in [16 mm], 0.625 in [16 mm], 0.5 in [13 mm] mounting spaces
- Each 3 in deep, two post rack features:
 - Universal junction hole pattern
 - Conformance to EIA-310-E
- Two post, high capacity network equipment racks offer increased cable capacity over standard racks
- Each two post, high capacity rack features:
 - Large vertical cable duct for increased cable capacity and D-rings for out-of-the-box cable management
 - Large side cable pass-thru holes for rack-to-rack cabling
 - Adjustable waterfalls on top cable management trays
 - Top angles with pre-drilled mounting holes for runway attachment
 - Can be assembled for either 19 inch or 23 inch equipment
- Four post network equipment racks offer stability, accessibility and open cooling with industry standard features
- Each four post rack features:
 - Nearly 360° of access – completely open to allow excess heat from equipment to quickly dissipate
 - Stamped, RMU (rack mount unit) markings conform to EIA-310-E

Description	Channel Depth	Width (inches)	Height RMU (inches)	Figure	Part Numbers
2 Post Rack	3 inches	19	45 (48)	A	1933559-1
2 Post Rack with Vertical Cable Management	6 inches	19 or 23	45 (84)	B	1933560-1
4 Post Rack	3 inches	19	45 (84)	C	1933570-1

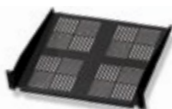
Blank Panels



- 19 inch wide panels are designed for use in filling equipment rack voids

Description	Figure	1U [1.75 in]	2U [3.50 in]	3U [5.25 in]	4U [7.00 in]	5U [8.75 in]
Standard	A	556965-1	556965-2	556965-3	556965-4	556965-5
Angled	B	1479992-1	1479992-2	—	—	—

Stationary, Ventilated Shelf



- Ventilation slots easily allow air flow
- Fits standard 19-inch racks
- Requires 2U (3.50 in)
- Includes fastening hardware

15

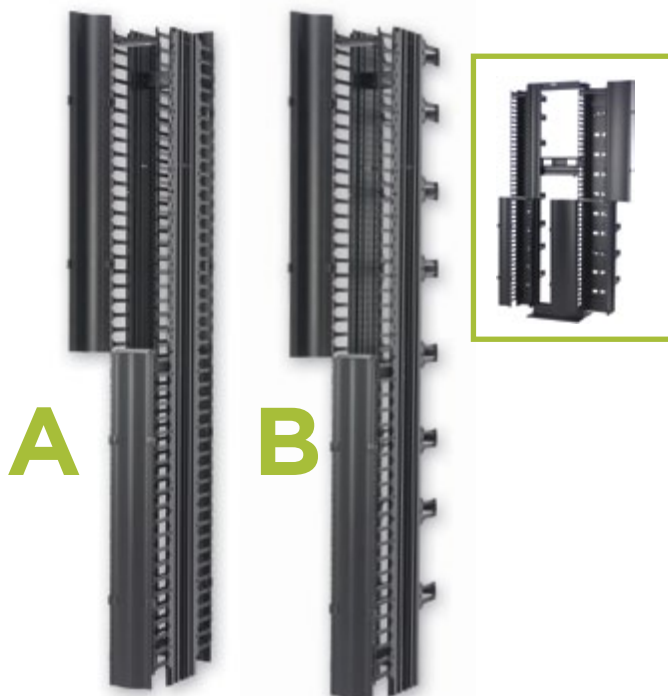
Description

Stationary, Ventilated Shelf for Standard 19-inch Racks

Part Numbers

1435049-1

Double Sided High Density Vertical Cable Managers



- Standard fingers are spaced 1U vertically and are 8.5 in deep
- Extended fingers are spaced at 1U vertically and are 11 in deep
- Gates have 9U vertical spacing and are 8.5 in deep
- Two-piece doors with snap on hinges allow for quick opening from either side or complete removal
- Six snap-on gates retain cables when doors are opened or removed.
- Easy installation, can be done in minutes using standard hand tools
- Works with EIA-310-D compliant two and four post equipment racks using industry standard mounting holes.
- ¼ in accessory mounting holes run the full height on both sides of cable manager to accommodate the attachment of cable management accessories
- Separator panel with pass through openings, vertical slots for attaching straps and keyhole slots for attaching spools, included with each manager
- Front and rear vertical sections can be spaced apart when mounting on racks deeper than 3 in (76 mm)
- Flat black powder coat aluminum with UL 94V-0 black plastic components
- Vertical cable managers include:
 - Front and Rear vertical cabling section, (4) doors, (6) gates, (50) push-in fasteners, (12) cable strap mounts, Separator panel and mounting hardware
 - On 10 in and 12 in wide cable managers only: (2) spool kits are included

Description	Figure	Front/Rear Duct Type	6 Inch Width	10 Inch Width	12 Inch Width
High Density Vertical Cable Manager, 84 inch, Double-sided	A	Standard Fingers/ Standard Fingers	1933534-1	1933535-1	1933536-1
		Extended Fingers/ Extended Fingers	1933537-1	1933538-1	1933539-1
High Density Combination Vertical Cable manager, 84 inch, Double-sided	B	Standard Fingers/Gates	1933540-1	1933541-1	1933542-1
		Extended Fingers/Gates	1933543-1	1933544-1	1933545-1

Horizontal High Density Cable Management



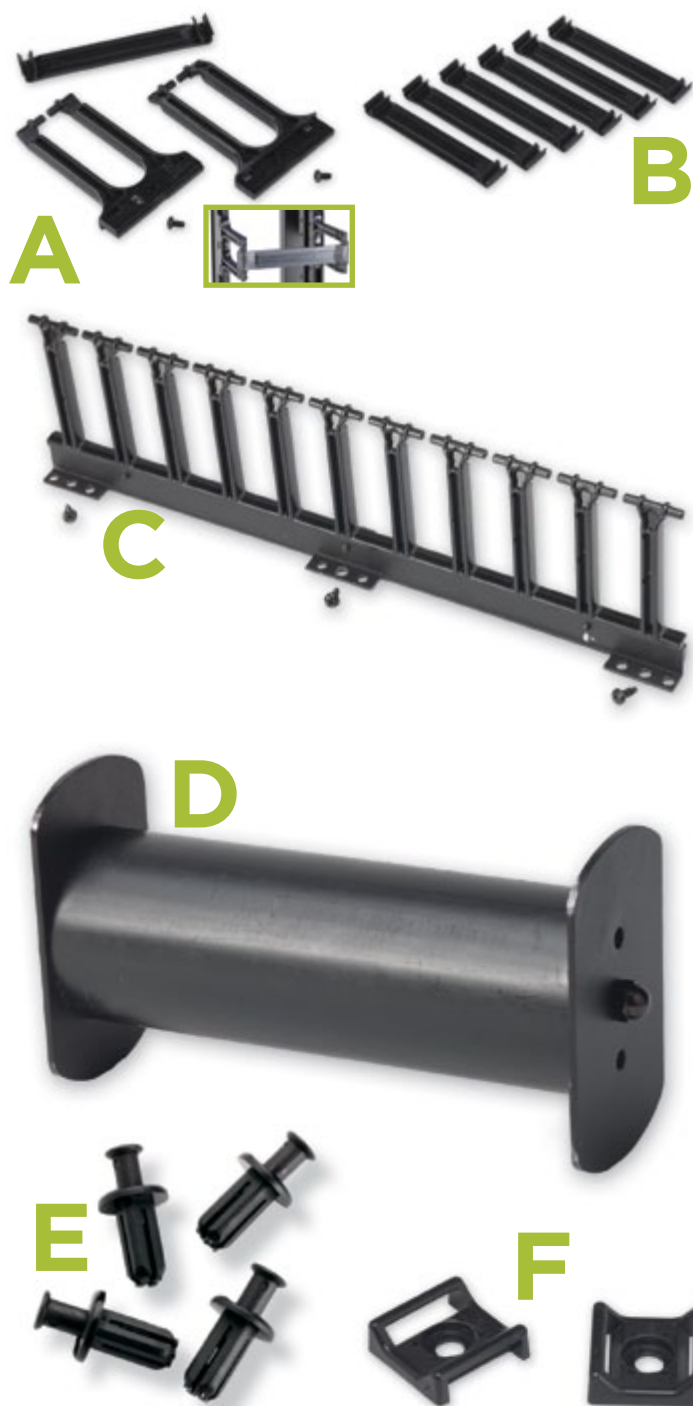
A
Single Sided

- Snap-on removable hinged door remains open past 180°
- #12-24 mounting hardware is included
- Flat black powder coat aluminum with UL 94V-0 black plastic components
- Standard fingers are 5.5 in deep
- Extended fingers are 8 in deep

Rack Mount Units (Height)	Width (inches)	Figure	Finger Type	Single Sided	Double Sided
1U	19	A	Standard Fingers	1933530-1	1933531-1
			Extended Fingers	1933564-1	1933565-1
2U	19		Standard Fingers	1933532-1	1933533-1
			Extended Fingers	1933566-1	1933567-1
3U	19		Standard Fingers	1933561-1	1933562-1
			Extended Fingers	1933568-1	1933569-1

High Density Cable Management Accessories

15



- Replacement Door Kits:
 - Include an upper and lower door section
 - Are for use with high density double-sided and double-sided combination vertical cable managers
- Gate kits (A):
 - Are used on the rear of combination managers when additional gates are desired
 - 2U high
 - Include (2) finger sections, (1) gate, and mounting hardware
 - Manufactured from UL 94V-0 black plastic
- Replacement gates (B):
 - Easy installation. Gates snap on and can be installed under doors
 - Gates can be opened in either direction, and can be quickly removed for easy cable access
 - Includes (6) gates
 - UL 94V-0 black plastic
- Side Cover Panels:
 - Used to cover the side of the vertical cable manager at the end of a row of racks
- Finger brackets (C):
 - High-density finger bracket mounts directly to a relay rack and provides cable support at each rack mounting unit
 - Fingers align with rack mounting units
 - Includes (1) finger bracket and mounting hardware
 - Flat black powder coat aluminum bracket with UL 94V-0 black plastic finger section
- Cable spools (D):
 - Provide 1.1 in (28mm) bend radius
 - Cable spools attach quickly to keyhole slots provided in mounting channels and optional back covers
 - Facilitates storage and routing of cable
 - Unique spool kit design provides for vertical and horizontal adjustability to suit any need
 - Spool kits includes (2) spools, mounting channels and hardware
 - Flat black powder coat steel with UL 94V-0 black plastic
- Fasteners (E):
 - Used to quickly attach accessories to ¼ in (6 mm) mounting holes in cable manager.
 - Can be easily removed for relocation.
 - Standard pack: 100 pieces
 - Black plastic UL 94V-2
- Cable strap mounts (F):
 - Provides attachment for cable straps up to ¾ in (19 mm) wide.
 - Attach with Push-in fastener 1933554-1 to ¼ in (6 mm) accessory mounting holes in cable manager
 - Standard pack: 100 pieces
 - Black Plastic UL 94V-0

Description

Figure

Part Numbers

		6 Inch Width	10 Inch Width	12 Inch Width
Replacement Door Kits		1933556-1	1933557-1	1933558-1
Gate Kit	A	1933546-1	1933547-1	1933548-1
Replacement Gates	B	1933549-1	1933550-1	1933551-1
Part Numbers				
Side Cover Panel		1933563-1		
Finger Bracket	C	1933552-1		
Cable Spools	D	1933553-1		
Fasteners	E	1933554-1		
Cable Strap Mounts	F	1933555-1		

Horizontal Finger Duct Panels and Accessories

15



A
Standard
Cover



B
Standard
Cover

- Cable management accessories for EIA standard 19-inch equipment racks
- Suitable for high performance twisted pair and optical fiber distribution cables and patch cords
- Horizontal finger duct panels available in single and double-sided versions
- Extended covers bridge the gap between finger duct and vertical cable management cords

Description		Panel Height	Front (HxD)	Rear (HxD)	Figure	Standard Covers	Extended Covers
Cable Management Panel	Single Sided	1U (1.75 in)	1.5 x 2 in	–		1375161-1	1375161-2
			1.5 x 3 in	–		1375162-1	1375162-2
		2U (3.50 in)	3.0 x 3 in	–	A	1375163-1	1375163-2
	Double Sided	1U (1.75 in)	1.5 x 2 in	1 x 4 in		1375160-1	1375160-2
			1.5 x 3 in	1 x 4 in		1375159-1	1375159-2
		2U (3.50 in)	3.0 x 3 in	2 x 4 in	B	1375158-1	1375158-2
Front Replacement Covers		1U (1.75 in)	–	–		1479225-1	1479225-2
		2U (3.50 in)	–	–		1479222-1	1479222-2
Rear Replacement Covers		1U (1.75 in)	–	–		1479224-1	–
		2U (3.50 in)	–	–		1479223-1	–

Vertical Finger Duct Panels



A

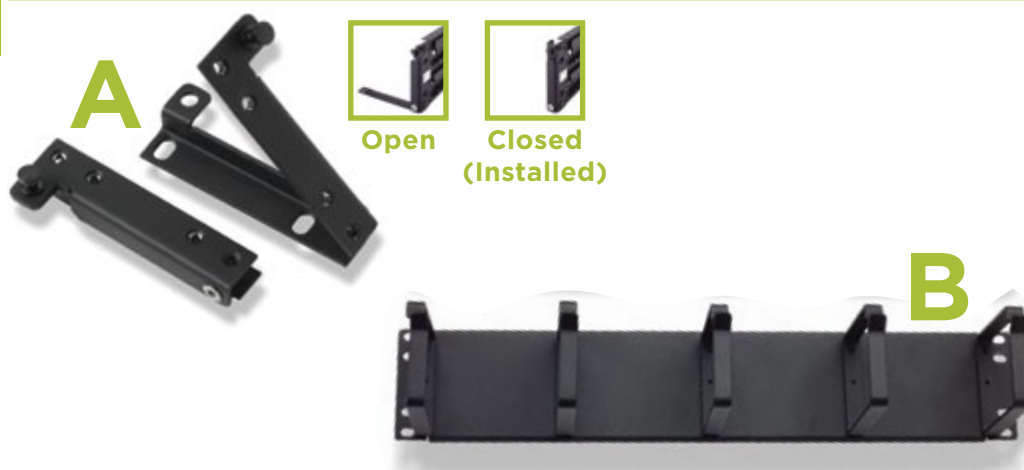


B

- Cable management accessories for EIA standard 19-inch equipment racks
- Suitable for high performance twisted pair and optical fiber distribution cables and patch cords
- Vertical finger duct panels available in single and double-sided versions
- Center mount vertical finger duct panels mount between racks for added stability
- Replacement covers are packaged ten (10) per box

Description	Mounting Position	Panel Height	Front (W x D)	Rear (W x D)	Figure	Part Number
Single-Sided	Side Mount	35 in	4 x 5 in		A	1375165-1
		78 in	4 x 5 in			1375258-1
	Center Mount	35 in	4 x 5 in		B	1375167-1
		78 in	4 x 5 in			1375260-1
Double-Sided	Side Mount	35 in	4 x 5 in	4 x 5 in	A	1375164-1
		78 in	4 x 5 in	4 x 5 in		1375257-1
	Center Mount	35 in	4 x 5 in	4 x 5 in	B	1375166-1
		78 in	4 x 5 in	4 x 5 in		1375259-1
Replacement Covers	Front or Rear	35 in				1479226-1
	Front	78 in				1479227-1
	Rear	78 in				1479227-2

Hinged Patch Panel Accessories



- For use with standard patch panels for hinged application where access behind patch panel is limited
- Hinged feature allows patch panel to be folded down for easy access to the back of the panel, while snapping securely into place for normal use
- Cable management panels have special ring spacing for hinged applications
- Hinged panels may not be stacked adjacent to one another in a rack without a cable management panel with a ½ inch of empty space between them

Description	Rack Mount Units	Figure	Part Numbers
Patch Panel Hinge Kit	1U (1.75")	A	1479582-1
	2U (3.50")		1479402-1
Cable Management Panel for Hinged patch Panels	1U (1.75")	B	1479732-1
	2U (3.50")		1479733-1

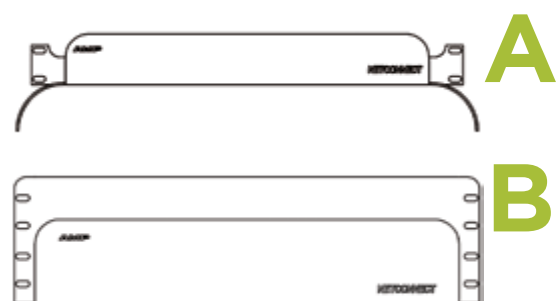
Horizontal Ringed Cable Management Panels



- Panels mount to the front of 19 inch racks and provide for the orderly dressing and routing of cable assemblies
- Threaded studs on the back of the panels allow the installation of an optional Cable Support Bar (see this chapter)
- 2U (3.50 in) 569049-1 comes with cable clips

Description	Height	Figure	Part Numbers
1U Panel	1.75 in	A	558329-1
2U Panel	3.50 in	B	558331-1

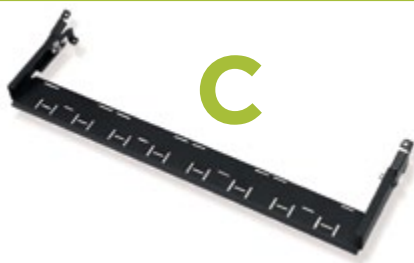
Rack Mount Cable Trough



- Light weight durable 11 AWG aluminum
- Fit standard 19-inch racks
- Top trough features:
 - Down-radiused cable exit to vertical cable management
 - Dimensions (overall): 4.20 in H x 19.00 in W x 3.75 in D
 - Mounts in 1U (1.75 in) of rack space
- Bottom/middle trough features:
 - Dimensions (overall): 5.22 in H x 19.00 in W x 3.75 in D
 - Mounts in 3U (5.25 in) of rack space
 - Mounts to standard EIA hole pattern
 - Provide cable management within the rack bay or multiple rack line-ups

Description	Figure	Part Numbers
Top Trough	A	559370-1
Bottom/Middle Trough	B	559369-1

Cable Support Bars



- Designed to provide additional cable support and routing control in the rear of 19-inch racks and panels
- See support bar to patch panel compatibility chart
- Cable support bars that mount directly to rack provide the best support. Other bars are available for specialty application

15

Mounting	Figure	Compatible with Panel	Part Number
Mounts to Back of Rack, 5 inches deep	A	All (mounts to rack)	557548-1
Mounts to Back of Rack, 2 inches deep	B	All (mounts to rack)	406042-1
Mounts to Back of Cable Management Panels		558329, 558331, 569049	558301-1
Mounts to Back of 110Connect and SL Series Patch Panels		406330, 406331, 406332, 1479194, 1479155, 147155, 406981, 1479156, 1375014, 1375015, 1375016, 1479449, 1479450, 1479206, 1479208	1479860-1
Mounts to Back of 1U XG and SL Series Multimedia Patch Panels	C	1933307, 1933309, 1933319, 1933321, 1933327, 1933331, 1933323, 1933325, 1933329, 1933333, 1933412	1933425-1

MRJ21 Cable Support Bars



- Mounts to the back of 19" racks
- Designed to provide additional cable support and routing control behind 19 inch racks and panels
- MRJ21 slotted manager bar for easy tie down
- Horizontal and vertical mounting option for MRJ21 tie down bar

Description	Depth (inches)	Figure	Part Numbers
MRJ21 Cable Manager Bar	6	A	1933352-1
	9	B	1933352-2
	12	C	1933352-3
	16	D	1933352-4

VELCRO Cable Ties



Standard Colors

- For 8 and 12 inch ties, an order quantity of one equals one roll of ten ties

Description	Figure	Black	White	Gray	Orange	Blue	Red	Yellow	Green	Violet
1 x 8 in	A	1375253-2	1375253-3	1375253-4	1375253-5	1375253-6	1375253-7	1375253-8	1375253-9	1-1375253-0
1 x 12 in	B	1375254-2	1375254-3	1375254-4	1375254-5	1375254-6	1375254-7	1375254-8	1375254-9	1-1375254-0
5/8 in x 5 yards	C	1375255-2	1375255-3	1375255-4	1375255-5	1375255-6	1375255-7	1375255-8	1375255-9	1-1375255-0
1 x 12 in Flame Retardant*		1375256-2	—	—	—	—	—	—	—	—

*NOTE: Complies with NEC 300-22(c) and (d) for use in environmental air handling spaces. Available in Black only.

NOTE: Colors in table are for reference only.

AMP-TY Nylon Cable Ties

15



Dimensions (Approximate)			Minimum Tensile Strength	Maximum Bundle Diameter	Package Quantity	Color	
Length	Width	Thickness				Natural	Black
4 in [103.0 mm]	0.096 in [2.44 mm]	0.037 in [0.94 mm]	18 lbs [80.1 N]	0.75 in [19.10 mm]	1000	2-604771-9	2-604771-0
					100	1-604771-9	1-604771-0
6 in [155.0 mm]	0.140 in [3.56 mm]	0.045 in [1.14 mm]	30 lbs [133.5 N]	1.25 in [31.75 mm]	1000	2-603227-9	2-603227-0
					100	1-603227-9	1-603227-0
8 in [204.0 mm]	0.184 in [4.67 mm]	0.047 in [1.19 mm]	50 lbs [222.5 N]	1.75 in [44.45 mm]	1000	2-604772-9	2-604772-0
					100	1-604772-9	1-604772-0
12 in [300.0 mm]	0.183 in [4.65 mm]	0.051 in [1.30 mm]	50 lbs [222.5 N]	3.00 in [76.20 mm]	1000	2-604751-9	2-604751-0
					100	1-604751-9	1-604751-0

Grounding Lug Kit



- Use for grounding panels to locations other than rack
- Accommodates a maximum wire size of 6 AWG

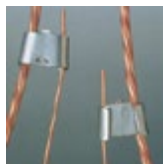
Description

Grounding Lug Kit

Part Numbers

556438-1

C-LOK, Solid and Stranded Copper Bonding Connectors



- Connects solid or stranded copper conductors in grounding applications
- Installs quickly and safely without special tools
- Meets requirements of: Telcordia TR-NWT-001075; UL Listed; Canadian Standards Association
- Search C-LOK connectors at www.tycoelectronics.com for additional information and part numbers

Multimedia SL Series Patch Panels



A
Standard

A
Angled

- Shielded panels accept AMP-TWIST, shielded, and unshielded SL Series Jacks and inserts
- Unshielded panels accept unshielded SL Series Jacks and inserts
- May be used to create custom configurations — including mixing fiber, twisted-pair, coax and A/V applications
- Ports may be individually replaced
- Angled versions allow elimination of horizontal cable management for higher rack densities and ease of cable dress
- Replacement labels and clear label covers in Chapter 17

Description	Shielding	Height	Width	Figure	Standard	Angled
12-Port	Shielded	1U (1.75 in)	19.0 in	A	1933412-1	—
	Unshielded	10.00 in	2.3 in		1375289-1	—
24-Port	Shielded	1U (1.75 in)	19.0 in		1933307-1	1933309-1
	Unshielded	1U (1.75 in)	19.0 in		1375291-1	1499622-1
48-Port	Shielded	2U (3.50 in)	19.0 in		1933308-1	1933310-1
	Unshielded	2U (3.50 in)	19.0 in		1375292-1	1499623-1
96-Port	Unshielded	4U (7.0 in)	19.0 in		2111159-1	—

Cover for Angled Patch Panels



- For use with angled patch panels
- Protects cabling from dust and damage
- Compatible with: 1499600, 1499601, 1499602, 1499603, 1499604, 1499605, 1933321, 1933322, 1933309, 1933310, 1499613, 1933333, 1933334, 1933329, 1933330, 1933325, 1933326 panels

Description

Cover for Angled Patch Panels

Part Numbers

1499614-1

Multimedia Integrated Cable Management SL Series Patch Panels



- Accept unshielded SL Series Jacks and inserts
- May be used to create custom configurations – including mixing fiber, twisted-pair, coax and A/V applications
- Allow elimination of horizontal cable management for higher rack densities and ease of cable dress
- Ports may be individually replaced
- Replacement labels and clear label covers in Chapter 17

Port Count	Height	Width	Figure	Part Number
24	1U (1.75 in)	19.0 in	A	1479449-1
48	2U (3.50 in)	19.0 in		1479450-1

Discrete Multimedia SL Series Patch Panel



- Accepts SL Series Jacks, MT-RJ Outlet Jacks, and SL Series Inserts (purchased separately)
- May be used to create custom configurations, including mixing fiber, twisted-pair, coax and A/V applications
- Allows for easy integration of fiber with copper in the same patch panel
- Clear cover on rear allows easy accessibility
- Shelf in back of panel organizes and manages cable
- Uses 110Connect XC labels (see Chapter 17)
- 2U (3.50 in) x 19 in W x 8 in D

Description

Discrete Multimedia SL Series Patch Panel

Part Numbers

1375156-1

Discrete High Density Angled SL Series Patch Panel



- Accepts AMP-TWIST, shielded, and unshielded SL Series Jacks and inserts (purchased separately)
- Highest density solution for 2U (3.50 in)
- Ports may be individually replaced
- Angled version allow elimination of horizontal cable management for higher rack densities and ease of cable dress

Description

72-Port Discrete Angled Panel

Height

2U (3.50 in)

Width

19.0 in

Part Number

1499613-1

110Connect Modular Jack Patch Panels

15



A
Unshielded



A
Shielded

- Shielded patch panels accept shielded 110Connect and Inserts for 110Connect Modular Jack Patch Panels
- Unshielded patch panels accept unshielded 110Connect and Inserts for 110Connect Modular Jack Patch Panels
- May be used to create custom configurations
- Ports may be individually replaced

Port Count	Height	Width	Figure	Unshielded	Shielded
16	1U (1.75 in)	19.0 in	A	557429-1	557429-2
32	2U (3.50 in)	19.0 in		557430-1	557430-2
48	3U (5.25 in)	19.0 in		557431-1	557431-2

NOTE: Shielded patch panels use grounding lug kit 556438-1 for isolated grounding

Inserts for 110Connect Modular Jack Patch Panels



- Used with 110Connect Modular Jack Patch Panels
- Multimode ST Coupler is suitable for use with Multimode Connectors
- Inserts also work with standard, 0.582 x 0.762 in openings

Description	Figure	Almond	Black
Blank	A	558856-2	558856-1
Multimode ST Coupler	B	558860-2	558860-1
BNC Coupler	C	558861-2	558861-1
F-Connector Coupler	D	558862-2	558862-1

NOTE: Not compatible with Standard or Angled Faceplates or Office Boxes.

1U Rack Mount Fiber Optic Patch Panel



- Accepts three (3) Snap-in Adapter Plates or MPO Cassettes (sold separately)
- Fits standard TIA 19-inch rack
- 1U (1.75 in)

Description	Part Number
1U Rack Mount Fiber Optic Patch Panel	1777125-1

Front Cable Management Assembly

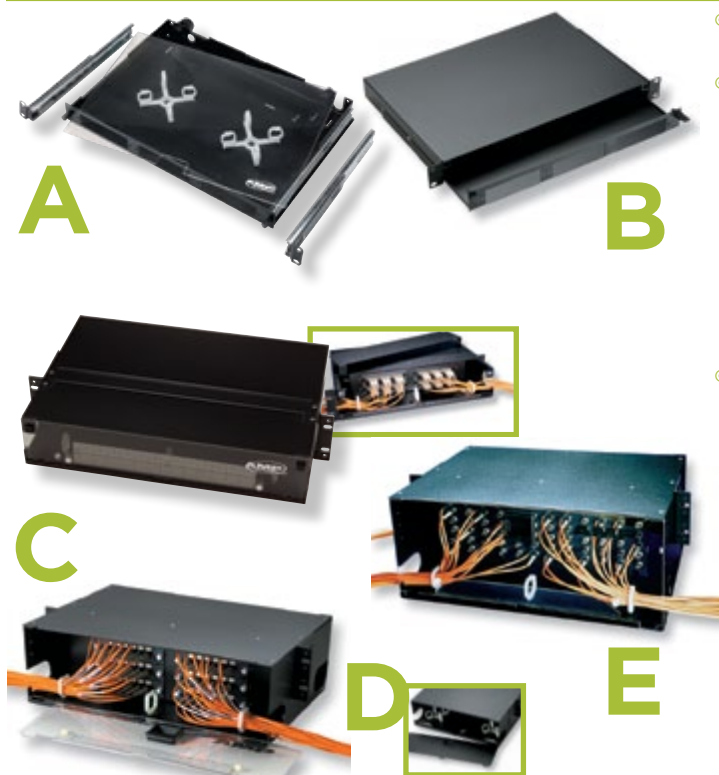


- Provides cable management and labeling to patch panels
- Fits standard TIA 19-inch rack
- Uses wiring block labels in Chapter 17
- Material/Color:
 - Manager: Aluminum/Black
 - Saddles: Plastic/White
 - Label Holder: Plastic/Clear

Description	Part Number
Front Cable Management Assembly	1777240-1

Unloaded Rack Mount Patch Enclosures

15



- Snap-in adapter plates or MPO cassettes sold separately
- 1U enclosure 1657014 features:
 - Heavy duty, smooth operating, slide mounting brackets
 - Clear, removable top cover
 - Flush mounting
 - Holds 2 splice trays (sold separately) P/N: 1639192-1 (package of two)
 - Fits standard TIA 19-inch racks
- 1U enclosure 1435555 features:
 - Quick release Slide and tilt drawer
 - Forward or flush mounting
 - Fits standard TIA 19-inch racks
 - Includes fiber management rings
 - Special design to hold armored or multiple trunk cables in place
 - Large rear cable entry with tie down brackets that can be mounted inside or outside of Enclosure
- 2U, 3U and 4U Enclosures feature:
 - Removable front and rear covers for easy access and installation
 - Front and rear fiber/cable management rings
 - Edge guard on front cable entries for cable assembly protection
 - Forward, flush or recessed mounting
 - Fits standard TIA 19" and 23" racks
 - Standard Cable Enclosure includes cable strain relief feature:
 - Special design to hold armored or multiple trunk cables in place
 - Large rear cable entry with tie down brackets that can be mounted inside or outside of enclosure
- Enclosures shown loaded for reference only

Height	Compatible Racks	Capacity Adapter Plates	Cassettes	Recommended Cable Types	Figure	Part Number
1U (1.75 in)	19-inch	3	3	Standard	A	1-1657014-7
				Armored and Multiple Trunk	B	1435555-1
2U (3.50 in)	19 or 23-inch	4	4	Standard	C	559542-2
				Armored and Multiple Trunk		1435556-1
3U (5.25 in)	19 or 23-inch	8	8	Standard	D	559614-2
				Armored and Multiple Trunk		1435557-1
4U (7.00 in)	19 or 23-inch	12	12	Standard	E	559552-2
				Armored and Multiple Trunk		1435558-1

Unloaded Rack Mount Patch Enclosure Fiber Densities

Enclosure	Fully Loaded Density	6-Fiber Adapter Plates	12-Fiber Adapter Plates or MPO Cassettes	24-Fiber Adapter Plates or MPO Cassettes
1U Enclosures	Fiber Density	18	36	72
	Duplex Port Density	9	18	36
2U Enclosures	Fiber Density	24	48	96
	Duplex Port Density	12	24	48
3U Enclosures	Fiber Density	48	96	192
	Duplex Port Density	24	48	96
4U Enclosures	Fiber Density	72	144	288
	Duplex Port Density	36	72	144

Unloaded Rack Mount Patch Enclosure Accessories

15



- Security Kit includes two (2) locks and one (1) aluminum front door (black)
- 1435187-2 is for use with 3U enclosure 559614-2 only

Description	Cable Diameter	Figure	Part Number
Cable Strain Relief	3.5 - 8 mm	A	1206144-1
	9 - 14 mm	B	1206145-1
Cable Management Ring Kit	—	C	1206146-1
3U Security Kit	—		1435187-2
4U Security Kit	—		1435161-2

*For use with 4U enclosure 559552-2 only

1U MT-RJ Rack Mount Patch Enclosure



- 1U, 48-fiber, MT-RJ high-density solution
- Loaded with housings for MT-RJ patch panel jacks (purchased separately)
- Holds up to twenty-four MT-RJ patch panel jacks, MT-RJ SECURE patch panel jacks or MT-RJ pigtail jack cable assemblies (each purchased separately)
- Quick release slide and tilt drawer
- Cable strain relief and management rings included
- Forward, flush or recessed mounting
- Fits standard TIA 19-inch rack
- Accepts icons for identification

Description	Fiber Density	Duplex Port Density	Part Number
MT-RJ Rack Mount Enclosure	48	24	1206704-4

Rack Mount Fiber Management Enclosures and Accessories



Front, Extended

- Holds excess loops of fiber cable or patch cords
- Drawer style
- Cable management loops included
- 2U (3.50 in)

Description	Part Number
Fiber Management Enclosure	1435808-1

Rack Mount Splice Enclosures



A

- Each splice tray holder accepts two (2) splice trays (sold separately)
- Uses 1435839 or 559433 splice trays (not included)
- Splice tray holders are located in front of unit allowing cable storage in rear
- Removable rear and clear front covers for easy access and installation
- Clear front cover
- Edge guard on front cable entry for cable assembly protection
- Fits standard TIA 19 and 23-inch racks

Rack Mount Units	Included Splice Tray Holders	Splice Tray Capacity	Fiber Splice Capacity	Figure	Part Number
3U (5.25 in)	3	6	72	A	559089-2
4U (7.00 in)	4	8	96		1435990-2

Rack Mount Splice and Patch Enclosure



Back,
Open



Front, Open
with Tray Extended

- Accepts up to three (3) snap-in adapter plates or MPO cassettes (sold separately)
- Accepts up to six (6) splice trays P/N: 559433 (see splice accessories table)
- Removable front and rear covers for easy access and installation
- Front and rear cable management rings
- Edge guard on front cable entries for cable assembly protection
- Forward, flush or recessed mounting
- Fits standard TIA 19 and 23-inch racks
- Specially designed to hold armored or multiple trunk cables in place
- Large side or rear cable entry features tie down brackets that can be mounted inside or outside of enclosure
- A splicing shelf is located over adapter plates
- Designed as a drawer for easy access

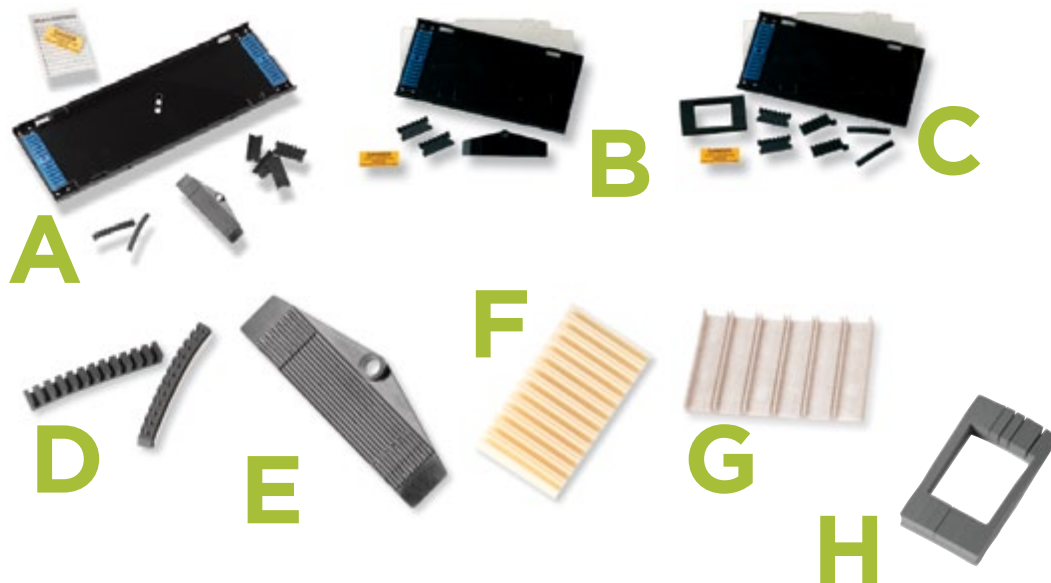
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Rack Mount Units	Adapter Plate Capacity	Splice Tray Capacity	Fiber Splice Capacity	Part Number
2U (3.50 in)	3	6	72	1435652-1

Rack Mount Splice and Patch Enclosure Fiber Density

	6-Fiber Adapter Plates	12-Fiber Adapter Plates or MPO Cassettes	24-Fiber Adapter Plates or MPO Cassettes
Fiber Density	18	36	72
Duplex Port Density	9	18	36

Splice Trays and Accessories



- Splice trays hold up to 12 splices each
- Accommodates both through (in-line) and end (butt) splice configurations
- Black anodized aluminum construction for durability and clear plastic top for improved fiber visibility
- Each splice tray includes clear plastic cover, end caps for fiber retention, and splice holders as listed
- Splice Holders are available:
 - With 559433 as listed
 - Separately from 1435839

Description	Compatible Enclosures/Holders	Compatible Splices	Splice Capacity	Figure	Part Number
Splice Tray	559089, 1435990	By Splice Holder (Available Separately)		A	1435839-1
	1435652, 1374526	Fusion	12	B	559433-2
		Fusion with Sleeve	12	C	559433-3
	1657014		12		1639192-1
Splice Holder	-	Fusion Splice with Sleeves	12	D	503085-1
		Fusion Splice without Sleeves	12	E	503886-1
		CORELINK Splice	12	F	559087-1
		Ribbon, Fusion with Sleeves, LightCrimp Splice	6	G	559066-1
			6	F	559299-1

Wall Mount Patch Enclosures

15

- Accept snap-in adapter plates or MPO cassettes as listed (plates and cassettes sold separately)
- Top and bottom cable entries feature integral rubber cable grommets



A



B



C



D



E



F

- Reversible cable strain relief bracket
- Internal cable management
- Fiber loop storage and management
- Recessed, easy-to-use door latches
- Designed for indoor use
- Enclosure 1278323:
 - Designed for use in protected areas
 - Allows access to adapter ports even when door closed
 - Optional lock package for added security
 - Nominal dimensions: 8 in (20 cm) H x 4 in (10 cm) D x 8 in (20 cm) W

- Enclosure 559561:
 - Optional lock package for added security
 - Nominal dimensions: 8 in (20 cm) H x 4 in (10 cm) D x 8 in (20 cm) W
- Enclosure 1435128:
 - MPO Cassettes in top two slots only
 - Integral hasp for use with off-the-shelf padlocks
 - Nominal dimensions: 12 in (30.5 cm) H x 3 in (7.6 cm) D x 12 in (30.5 cm) W

- Enclosure 1278755:
 - Reversible cable strain relief bracket
 - Can house one splice holder (1374526)
 - Optional lock package for added security
 - Knockout ports for cable glands or grommets
 - Nominal dimensions: 16.5 in (40 cm) H x 14 in (35.5 cm) D x 5 in (13 cm) W
- Splice tray holder 1374526:
 - Holds up to four splice trays
 - Can mix and match splice trays
 - Splice trays hold up to 12 splices
 - Black anodized aluminum construction for durability and improved fiber visibility
 - Each splice tray includes clear plastic cover, end caps for fiber retention, and appropriate splice holders
- Enclosures shown loaded for reference only

Description	Adapter Plate/Cassette Capacity	Number of Doors		Figure	Part Number
Wall Mount Patch Enclosures	2	1	No Optional Components	A	1278323-2
	2	2	No Optional Components	B	559560-2
	4/2	1	No Optional Components	C	1435128-1
	4	2	No Optional Components	D	559561-2
			with Lock and Flat Tie Holders		559561-3
			No Optional Components	E	1278755-1
	6/-	2	with Cable Glands and Cable Grommets		1278755-3
			with Cable Glands, Cable Grommets and one Splice Tray Holder (1374526)		1278755-4
Optional Lock (For Use With 1278323, 559560, 559561 and 1278755)					559501-2
Replacement Cable Grommets (For Use With 1278323, 559560, 559561 and 1278755)					559496-2
Splice Tray Holder (for use with 1278755)					F 1374526-1

Wall Mount Patch Enclosures Fiber Densities

Enclosure	Fully Loaded Density	6-Fiber Adapter Plates	12-Fiber Adapter Plates/ MPO Cassettes	24-Fiber Adapter Plates/ MPO Cassettes
1278323	Fiber Density	12	24	48
	Duplex Port Density	6	12	24
559560	Fiber Density	12	24	48
	Duplex Port Density	6	12	24
559561	Fiber Density	24	48	96
	Duplex Port Density	12	24	48
1435128	Fiber Density	24	48/24	96/48
	Duplex Port Density	12	24/12	48/24
1278755	Fiber Density	36	72/-	144/-
	Duplex Port Density	18	36/-	72/-



15-16

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LAN Electronics General Product Information.....02

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AMP NETCONNECT Ethernet LAN Switches



Tyco Electronics offers a wide range of high performance, cost-effective AMP NETCONNECT Ethernet switches. The AMP NETCONNECT switches include unmanaged compact Ethernet switches, smart Ethernet switches with built-in or optional fiber uplink ports and SNMP managed Ethernet switches with optional fiber or twisted pair Gigabit uplink ports.

AMP NETCONNECT basic, unmanaged compact Ethernet switches are ideal for Small Office/Home Office (SOHO), small workgroup or home networking applications. Smart Ethernet switches have fiber uplink ports either built-in/ fixed (8-Port switch only) or optional (16- and 24-Port switches) to enable high speed connections to backbones, servers, and network devices over single-mode or multimode (50 or 62.5/125 μm) fiber using industry standard MT-RJ, SC, and ST-Style connectors. SNMP managed Ethernet switches deliver management capabilities required by most network managers using interfaces such as direct connection to a console port, Telnet, or web browser sessions. Optional fiber or twisted pair uplinks can be added for high speed network interface. Fiber uplinks include single-mode and multimode (50 or 62.5/125 μm) Gigabit (1000BASE-SX or LX) and 100BASE-FX. Optional twisted pair uplink is via an RJ-45, 100/1000BASE-T interface. These uplinks can be used in any combination on the switch to deliver a highly flexible backbone solution.

With an emphasis on high quality, competitive cost, and ease of use, AMP NETCONNECT Ethernet switches are a great choice for anyone from a home office user to an enterprise IT manager.

AMP NETCONNECT Smart Ethernet Switches



AMP NETCONNECT smart switches can be configured using the local console port to control functions such as VLAN assignments and port enable/disable modes.

This capability is ideal for network managers who want a basic level of network control.

- Supports 10BASE-T and 100BASE-TX Ethernet applications
- For use with RJ-45, shielded or unshielded, Category 6, 5e and 5 twisted pair structured cabling systems
- Data rate auto-negotiation and full or half duplex mode auto-selection
- Auto MDI/MDI-X detection eliminates the need for crossover cable assemblies
- Strong metal case helps to protect the switch against damage
- Powered via an internal, auto-ranging AC/DC power unit
- Can be mounted in either 10 or 19 inch frames

AMP NETCONNECT SNMP Managed Ethernet Switches



AMP NETCONNECT SNMP managed Ethernet switches allow network managers excellent control and visibility of distributed switches using advanced functions accessible through a direct connection to the console port, Telnet or web browser sessions, or SNMP programs. This capability is ideal for network managers who want to have versatile control of their network.

AMP NETCONNECT Ethernet Media Converters



AMP NETCONNECT Ethernet media converters are high quality media conversion products that support 10BASE-T, 100BASE-TX and Gigabit (1000BASE-T) Ethernet standards and can be used in a wide range of applications including office buildings, professional workgroups, campuses, Fiber-to-the-Desk (FtTD), and industrial systems.

Media converters are used to extend Ethernet segments or LANs to servers and other network elements using single-mode or multimode (50 or 62.5 μm) optical fibers connectorized with the

MT-RJ, SC, or ST connectors.

With a strong focus on simple, cost effective, quality installations, AMP NETCONNECT media converters enable a wide range of reliable network solutions.

AMP NETCONNECT Power over Ethernet Products



The AMP NETCONNECT 8-port & 24-port Power over Ethernet (PoE) Midspan device for 802.3af applications offers a per-port, cost-effective solution when powering remote devices like VoIP phones, WLAN access points, security devices, etc. The AMP NETCONNECT 8-port and 24-port PoE midspan devices makes injecting DC power onto existing copper cabling as simple as routing patch cords and it eliminates the PoE costs for powered switch ports when power is not needed.

5 and 8-Port Compact Ethernet Switch



- Compact and easy to install Ethernet switches
- Ideal for Small Office/Home Office (SOHO), small business and home networking applications
- Supports 10BASE-T, 100BASE-TX, 1000BASE-T Ethernet applications
- For use with RJ-45, shielded or unshielded, Category 6, 5e and 5 twisted pair structured cabling systems
- Data rate auto-negotiation and full or half duplex mode auto-selection
- Auto MDI/MDI-X detection eliminates the need for crossover cable assemblies
- Strong metal case helps to protect the switch against damage
- Powered via a compact external AC power adapter

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Description	Port Count	Ethernet Speed (Mbps)	Figure	Part Number
Compact Ethernet Switch	5	10/100	A	1591090-1
		10/100/1000		1591081-1
	8	10/100	B	1591036-1
		10/100/1000		1591083-1

16 and 24-Port Compact Ethernet Switch



- Compact and easy to install Ethernet switches
- 16-Port Compact Ethernet Switch is ideal for small office/business and home networking applications
- 24-Port Compact Ethernet Switch is ideal for medium sized office/business applications
- Supports 10BASE-T and 100BASE-TX Ethernet applications
- For use with RJ-45, shielded or unshielded, Category 6, 5e, and 5 twisted pair structured cabling systems
- Data rate auto-negotiation and full or half duplex mode auto-selection
- Auto MDI/MDI-X detection eliminates the need for crossover cable assemblies
- Strong metal case helps to protect the switch against damage
- Powered via an internal, auto-ranging AC/DC power unit
- Can be mounted in either 10 or 19 inch frames
- Optional brackets for standard 19 inch rack mounting included

Description	Port Count	Figure	Part Number
Compact Ethernet Switch	16	A	1591070-1
	24	B	1591072-1

8-Port Smart Ethernet Switches with Fiber Uplink Ports

16



A

- For additional features, see page 02
- Ideal for linking small workgroups to remote servers or routers via integral fiber uplink port
- Basic port controls and VLAN settings are manageable via console port located on rear of unit
- Optional brackets for standard 19" rack mounting available separately
- Optical fiber uplinks:
 - Fiber uplink ports support 100BASE-FX applications and feature speed auto-negotiation and auto MDI/MDI-X detection eliminating the need for cross over cables
 - Compatible with 50/125µm and 62.5/125µm fiber types
 - Available with Multimode SC, ST, and Single-mode SC fiber uplink ports

Description	Fiber Uplink	Figure	Part Number
8-Port Smart Ethernet Switch	SC Duplex, Multimode	A	1591038-1
	SC Duplex, Single-mode		1591044-1
	ST Multimode		1591040-1
19" Mounting Brackets (Set of two)			1591068-0

24-Port Smart Ethernet Switch II with Optional Dual Uplink Port



A

B

Sold Separately

- Supports 10BASE-T, 100BASE-TX, and Fast Ethernet standards
- Optional dual or single fiber uplink module only needs to be fitted if fiber link is required
- Fully managed smart switch II through the RS232 console port
- Supports up to 26 port-based VLANs
- Supports QoS (802.1p, DiffServ and port based)
- Programmable port speeds and duplex modes
- Supports full or half-duplex auto-negotiation together with N-Way capability on the RJ-45 ports
- Auto-MDI/MDI-X support on each copper port
- Meets international safety and EMC approvals
- 2.5 Mb/s memory buffer
- 8K MAC with auto learning
- High speed 8.8Gb/s Back Plane

Description	Figure	Part Number
24-Port Smart Ethernet Switch II	A	1591093-1

Description	Application	Interface Type	Figure	Part Number
Optional Uplink Port Modules	100BASE-Fx	SC Multimode Fiber	B	1591094-0
		ST Multimode Fiber		1591095-0
		SC Single-mode Fiber		1591096-0
	Dual Gigabit	Multimode 1000BASE-Sx		1591097-0
		Single-mode 1000BASE-Lx		1591098-0
		Twisted Pair 1000BASE-T		2-1591019-0

24-Port Stackable Managed Switch with Optional Expansion Port



Sold Separately

- Supports 10BASE-T, 100BASE-TX, and Ethernet applications
- Available uplink modules provide optional fiber 100BASE-FX or optical fiber or copper gigabit capabilities
- Supports full of half-duplex auto-negotiation together with N-Way capability on the RJ-45 port
- Auto-MDI/MDI-X eliminates the need for RJ-45 crossover cables
- Managed and controlled from a console port, Telnet, SNMP or Web Browser
- IP stackable management supporting 8 separate switches
- VLANs, IGMP and QoS support
- Static MAC address port security
- Programmable bandwidth rules
- Comprehensive LED indicators
- Programmable port mirroring
- Up to 7-port trunks supported
- Supports 802-1x user authentication

16

Description	Figure	Part Number
24-Port Stackable Managed Switch	A	1591099-1

Description	Application	Interface Type	Figure	Part Number
Optional Uplink Port Modules	100BASE-Fx	SC Multimode Fiber	B	1591094-0
		ST Multimode Fiber		1591095-0
		SC Single-mode Fiber		1591096-0
	Dual Gigabit	4-Fiber Multimode 1000BASE-Sx		1591097-0
		4-Fiber Single-mode 1000BASE-Lx		1591098-0
		2-Port Twisted Pair 1000BASE-T		2-1591019-0

Fast Ethernet Media Converters

16

A



- Ideal for both new and legacy LAN applications
- RJ-45 Port:
 - For use with shielded or unshielded, Category 6, 5e, and 5 twisted pair structured cabling systems
 - Supports 10BASE-T and 100BASE-TX Ethernet applications
 - Data rate auto-negotiation and full or half duplex mode auto-selection
 - Auto MDI/MDI-X detection eliminates the need for crossover cable assemblies
- Optical Fiber Port:
 - For use with MT-RJ, SC, or ST, Multimode or SC Single-mode optical fiber connectors
 - Multimode fiber ports are compatible with 50/125µm and 62.5/125µm fiber types
 - Supports 100BASE-FX Ethernet applications
 - Increased network resilience through Link Loss forwarding function that allows suitable Ethernet switches to implement alternate paths when required
- Stand-alone or chassis mountable
- Strong metal case helps to protect the media converter against damage
- Powered via an external, AC power adapter
- Dimensions 4.7 in x 3.4 in x 1.0 in

Description	Optical Fiber Interface	Figure	Part Number
Fast Ethernet Media Converter	MT-RJ Multimode	A	1591028-1
	SC Duplex Multimode		1591024-1
	SC Duplex Single-mode		1591030-1
	ST Multimode		1591026-1

Gigabit Ethernet Media Converters

A



- Ideal for both new and legacy LAN applications
- RJ-45 Port:
 - For use with shielded or unshielded, Category 6, 5e and 5 twisted pair structured cabling systems
 - Supports 1000BASE-T Ethernet applications data rate auto-negotiation and full or half duplex mode auto-selection
 - Auto MDI/MDI-X detection eliminates the need for crossover cable assemblies
- Optical Fiber Port:
 - For use with SC Multimode or single-mode fiber optic connectors
 - Multimode fiber ports are compatible with 50/125 µm and 62.5/125 µm fiber types
 - Supports 1000BASE-SX and 1000BASE-LX Ethernet applications
- Stand-alone or chassis mountable
- Strong metal case helps to protect the media converter against damage
- Powered via an external, AC power adapter
- Dimensions 4.7 in x 3.4 in x 1.0 in

Description	Figure	Part Number
1000BASE-SX SC Duplex Multimode	A	1591020-1
1000BASE-LX SC Duplex Single-mode		1591022-1

Rack Mount Media Converter Chassis System



Media Converters Sold Separately

- Mounts in standard 19 inch racks
- 3U (5.25 in)
- Accepts up to ten (10) Fast Ethernet or Gigabit Ethernet Media Converters (sold separately)
- Ideal for enterprise critical and networks
- Can be loaded with mixed types of media converters for flexibility
- Media converters can be hot-swapped within the chassis
- Media converters are purchased separately
- Media Converter Chassis is shipped unloaded and includes one installed power supply
- A second power supply can be installed for a dual redundancy power system
- Power supplies can be hot swapped for critical availability networks

Description	Part Number
Empty Rack Mount Media Converter Chassis System	1591032-1
Spare/Redundant AC Power Unit	1591034-0

8-Port PoE Midspan Device



- IEEE 802.3af compliant
- Supports 10/100/1000 Mb/s Ethernet
- 19" metal frame mountable
- Universal 110/220 V (50/60 Hz) power supply
- Full power on every port (15.4 W)

16

Description	Figure	Part Number
8-Port PoE Midspan	A	1591188-1
1U, 19" Mounting Frame (holds three 8-Port PoE Midspan Devices)	B	1591185-0

24-Port PoE Midspan Device



- IEEE 802.3af compliant
- Supports 10/100/1000 Mb/s Ethernet
- 185W total power
- Optional power upgrade
- Optional phantom power version available

Description		SNMP Management	
		With Out	With
24-Port PoE Midspan Device	unused pairs	1591187-1	1-1591187-1
	phantom power	2-1591187-1	3-1591187-1



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Labeling General Product Information.....	02
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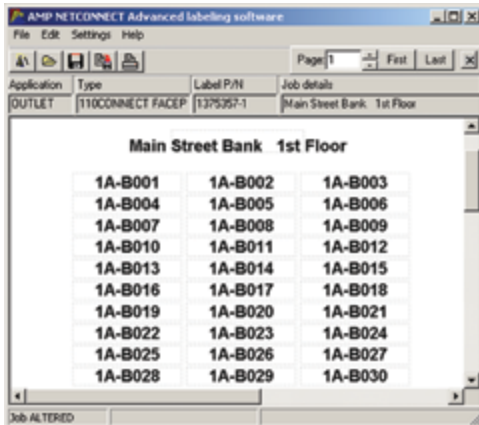
Faceplate/Outlet and Label Compatibility List

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Description		Card Stock	Self-adhesive Polyester	Label Cover	Label Cover	Self-adhesive Polyester	Self-adhesive Polyester
		1375356	1375357	1375345	1479268	1375358	1375353
SL Series Modules	1116406	—	—	—	—	X	—
	1116408	—	—	—	—	X	—
	1339118	X	X	X	X	—	—
SL Series Faceplates	1339119	—	X	—	—	—	—
	1479486	X	X	X	X	—	—
	1375155	X	X	X	X	—	—
Angled Faceplates	406185	X	X	X	X	—	—
	503999	—	—	—	—	—	X
HIDEOUT Outlet	503997	—	—	—	—	—	X
	503998	—	—	—	—	—	X
	1479815	X	X	X	X	—	—
HIDEAWAY Multimedia Outlets	1479946	X	X	X	X	—	—
Multimedia Security Outlet	1116535	—	—	—	—	—	—
Surface Mount Outlet	557366	—	—	—	—	—	—
Surface Mount Outlet Accessories	1116098	—	—	—	—	—	—
	557775	—	—	—	—	—	—
	1479488	—	—	—	—	—	X
Universal Office Boxes	1479489	—	—	—	—	—	X
	1479490	—	—	—	—	—	X
12-Port Universal Office Box	1479358	X	X	X	X	—	—
Modular Jack Boxes	1116697	—	—	—	—	X	—
	1116698	—	—	—	—	X	—
WIREMOLD Raceway Faceplates	1375050	X	X	X	X	—	—
	1375049	X	X	X	X	—	—
SL Series Furniture Outlets	1375005	—	—	—	—	X	—
	1375006	—	—	—	—	X	—

AMP NETCONNECT Labeling Software

VISIT WWW.AMPNETCONNECT.COM/LABELING TO
DOWNLOAD A FREE TRIAL COPY OR TO ORDER
SOFTWARE FROM SILVER FOX, LTD!



- Compatible with 32 or 64-bit versions of Microsoft® Windows® 2000, NT, XP, Vista or 7 operating systems
- Flexible build option to produce more complex alphanumeric identifiers
- Create identifiers consisting of up to 12 independent segments
- Can cope easily with the TIA/EIA-606-A standard identification sequences
- Insert symbols (all standard Windows symbols can be used)
- Save and edit builds
- Fine tune adjustment
- Split your label format as required
- Job notepad facility for builds saved to file
- Justify text
- Adjust font style and size
- Context-sensitive help

17

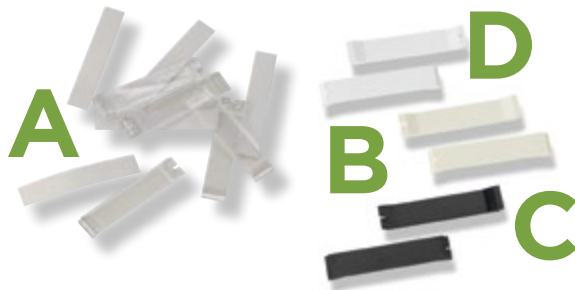
Standard Labels for Outlets



- Labels are designed to fit AMP NETCONNECT and similar faceplates and surface outlets
- Card stock labels are perforated and compatible with inkjet and laser printers
- Self-adhesive polyester labels are pre-cut and compatible with laser printers
- Labels are supplied on 8.5 x 11 inch sheets
- For use with:
 - SL Series Faceplates
 - HideAway Multimedia Outlet
 - Wiremold Raceway Faceplates
 - Universal Office Box, 6-Port
 - Multimedia Security Outlet
 - ACO Faceplates

Description	Label Size (W x H)	Labels per Sheet	360 Labels (5 Sheets)	7200 Labels (100 Sheets)
Card Stock	1.98 in x 0.373 in	72	1375356-1	5-1375356-1
Self-adhesive Polyester	1.98 in x 0.373 in	72	1375357-1	5-1375357-1

Label Covers for Faceplates



- Kit includes fifty die-cut labels and clear plastic covers
- For use in SL Series, angled, iconable ACO, and Wiremold compatible faceplates
- Can be used in place of clear label covers provided with SL Series and angled faceplates
- Included with compatible faceplate kits

Description	Color	Figure	Part Number
Label Cover	Transparent	A	1375345-1
	Almond	B	1479268-1
	Black	C	1479268-2
	White	D	1479268-3
	Gray		1479268-4
	Electrical Ivory		1-1479268-1

Universal Labels

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- AMP NETCONNECT Labeling Software allows customization of the universal labels listed for use with multiple products
- The Software provides cut lines to modify the labels for each particular application
- Number of labels per package will vary according to individual application

Description	Application	Labels per Sheet	Labels per Package		5 Sheets	100 Sheets
			5 Sheets	100 Sheets		
Self-adhesive Polyester	Modular Jack Box, 1-Port	216	1,080	21,600	1375358-1	5-1375358-1
	Modular Jack Box, 2-Port	120	600	12,000	1375358-1	5-1375358-1
	SL Series Furniture Outlet	72	360	7,200	1375358-1	5-1375358-1
	SL Series Faceplate, Double Gang	72	360	7,200	1375358-1	5-1375358-1
	110Connect Office Box, 2-Port and 4-Port	144	720	14,400	1375353-1	5-1375353-1

Labels for Patch Panels



- All labels are designed to fit AMP NETCONNECT Standard and Angled patch panels
- AMPTRAC 6-Pack Patch Panels (Standard or Angled) use part number 1375353 labels only
- Labels are supplied on 8.5 x 11 inch sheets
- Card stock labels are perforated and compatible with inkjet and laser printers
- Self-adhesive polyester labels are pre-cut and compatible with laser printers
- Special 0.25 inch high label is provided for use when icons are also desired
- For use with:
 - 110Connect Cat 6 Patch Panels and Mini Patch Panels
 - 110Connect Cat 5e Patch Panels and Mini Patch Panels
 - 110Connect Cat 5 Patch Panels and Mini Patch Panels
 - SL Series Multimedia Patch Panels and Mini Patch Panels

Description	Label Size (W x H)	Labels per Sheet	Labels per Package		5 Sheets	100 Sheets
			5 Sheets	100 Sheets		
Card Stock	3.10 in x 0.50 in	36	180	3600	1375351-1	5-1375351-1
Self-adhesive Polyester	3.10 in x 0.50 in	36	180	3600	1375352-1	5-1375352-1
	3.30 in x 0.25 in	72	360	7200	1375353-1	5-1375353-1

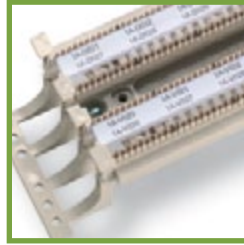
Label Covers for Patch Panels



- Includes twenty-five sheets, four clear plastic label covers per sheet
- For use with Category 6, 5e, 5 and SL Series Multimedia Patch Panels
- Included with compatible patch panels

Description	Part Number
Label Covers for Patch Panels	1116044-2

Labels for 110Connect XC Cross-Connect Wiring Blocks



- Labels are designed to fit the AMP NETCONNECT 610XC and 110Connect XC Cross-connect systems and other similar products
- Card stock labels: designed to fit into standard clear designation strips, available in TIA/EIA-606-A compliant colors, perforated, and compatible with inkjet and laser printers
- White self-adhesive polyester labels: designed for easy application to the front of the clear designation strips, pre-cut and compatible with laser printers
- Labels are supplied on 8.5 x 11 inch sheets

Description	Label Size (W x H)	Labels per Sheet	Color	90 labels (5 Sheets)	1800 labels (100 Sheets)
Card Stock	7.90 in x 0.48 in	18	White	1375354-1	5-1375354-1
			Blue	1375354-2	5-1375354-2
			Green	1375354-3	5-1375354-3
			Purple	1375354-4	5-1375354-4
			Red	1375354-5	5-1375354-5
			Brown	1375354-6	5-1375354-6
			Yellow	1375354-7	5-1375354-7
			Orange	1375354-8	5-1375354-8
			Gray	1375354-9	5-1375354-9
Self-adhesive Polyester	7.90 in x 0.48 in	18	White	1375355-1*	5-1375355-1*

*Note: Available in white only.

Clear Label Holder for 110Connect XC Wiring Blocks



- Used with 110Connect XC Cross-Connect Systems

Description	Part Number
Clear Label 110Connect XC Wiring Blocks	558417-1

Labels for Cable and Cable Assemblies



- Labels are designed for use on cable and cable assemblies
- Labels are pre-cut and compatible with laser printers

Description	Application	Label Size (W x H)	Labels per Sheet	Labels per Package	5 Sheets	100 Sheets
Self-adhesive Polyester	4-Pair Cable	0.984 in x 1.496 in	48	240 4800	1479002-1	5-1479002-1
	25-Pair Cable	0.984 in x 2.480 in	24	120 2400	1479003-1	5-1479003-1



- For use with:
 - SL Series Modules
 - SL Series Furniture Outlets
 - SL Series Mounting Straps
 - Modular Jack Boxes
 - Standard Faceplates
 - Universal Office Boxes
 - HideAway Outlet
 - HideOut Outlet
 - Iconable ACO Faceplates
 - FLEX-MODE Electrical Faceplates
 - MT-RJ Rack Mount Enclosure
 - MT-RJ Snap-In Adapter Plate
 - SL Series Category 5E and 6 Patch Panels
 - 110Connect Category 5 and 5e Patch Panels
 - SL Series Multimedia Jack Patch Panels
 - Iconable ACO Patch Panels
 - And other products as listed in each part's Product Facts

Each Wheel Contains:

Data	Blank	Phone	Fax	Modem	Print	Cat 5	Cat 5e	Cat 6	V1	V2	D1	D2	Almond	Red	Green	Blue	Yellow	Black	Orange	White	Violet	Gray	Electrical Ivory
4	4	2	1	1	1	3	-	-	-	-	-	-	558176-1	558176-2	558176-3	558176-4	558176-5	558176-6	558176-7	558176-8	558176-9	1-558176-0	1-558176-1
-	4	-	-	-	-	2	2	1	1	1	1	1	1375092-1	1375092-2	1375092-3	1375092-4	1375092-5	1375092-6	1375092-7	1375092-8	1375092-9	1-1375092-0	1-1375092-1
16	-	-	-	-	-	-	-	-	-	-	-	-	558198-1	558198-2	558198-3	558198-4	558198-5	558198-6	558198-7	558198-8	558198-9	1-558198-0	1-558198-1
-	-	16	-	-	-	-	-	-	-	-	-	-	558199-1	558199-2	558199-3	558199-4	558199-5	558199-6	558199-7	558199-8	558199-9	1-558199-0	1-558199-1
-	16	-	-	-	-	-	-	-	-	-	-	-	558821-1	-	-	-	-	558821-6	-	558821-8	-	1-558821-0	1-558821-1



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AMP, AMP NETCONNECT, NETCONNECT, TE LOGO AND TYCO ELECTRONICS ARE TRADEMARKS.
OTHER PRODUCTS, LOGOS AND COMPANY NAMES MENTIONED HEREIN MAY BE TRADEMARKS OF THEIR RESPECTIVE OWNERS.



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IP Code = IPXY

X = Protection from foreign objects

X	1	2	3	4	5	6
Description	Protected from penetration of solid objects > 50.0 mm Ø	Protected from penetration of solid objects > 12.5 mm Ø	Protected from penetration of solid objects > 2.5 mm Ø	Protected from penetration of solid objects > 1.0 mm Ø	Partially protected dust. Dust shall not penetrate in quantities to interfere with proper operation or safety	Dust-tight

Y = Protection from water

Y	1	2	3	4	5	6	7	8
Description	Protected from vertically falling drops of water	Protected from vertically falling drops of water while enclosure is tilted up to 15° from vertical	Protected from water sprayed up to 60° from both sides of vertical	Protected from water splashed from all directions	Protected from jets of water spraying from all directions	Protected from powerful jets of water spraying from all directions	Protected from immersion in water for 30 minutes at a depth of 1 meter	Protected from continuous immersion in water for time and depths more severe than 7

Conversion of IP and NEMA Enclosure Ratings (including but not limited to the following)

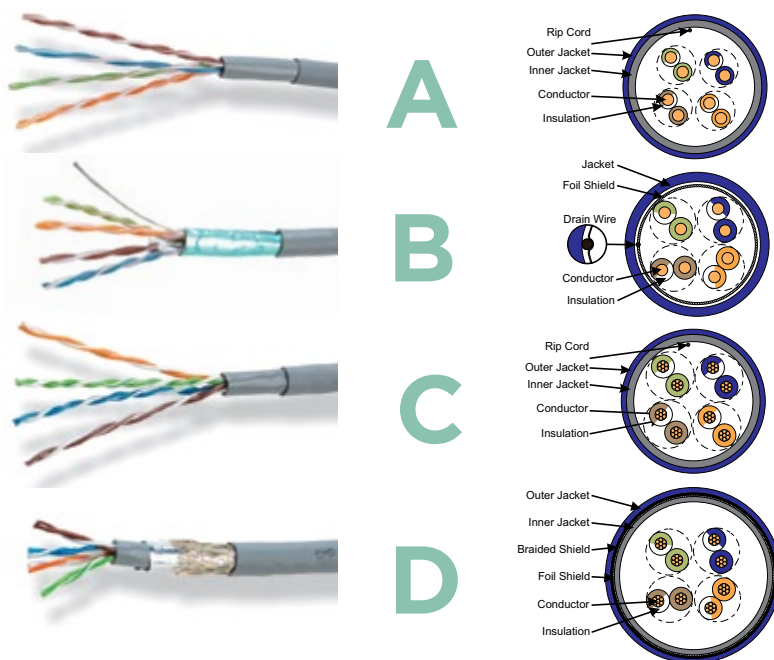
IEC	IP10	IP11	IP54	IP14	IP54	IP56	IP52	IP67	IP52	IP54
NEMA	1	2	3	3R	3S	4 & 4X	5	6 & 6P	12 & 12K	13

Conversion of PG and Metric

PG Size and Thread Type	Metric Size and Thread Type	For Use With
PG 11	M16 x 1.5	Cable: 0.20 – 0.39 in [5 – 10 mm]
PG29	M32 x 1.5	¾-inch Conduit: 0.71 – 0.98 in [18 – 25 mm]
PG36	M40 x 1.5	1-inch Conduit: 0.87 – 0.1.26 in [22 – 32 mm]

EtherSeal Category 5e Cable

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- Meets or exceeds TIA/EIA-568-B Enhanced Category 5 and ISO Class D 11801: 2002 specifications
- Meets or exceeds all requirements for Gigabit Ethernet
- Sunlight (UV) resistant for harsh environments
- Oil resistant, Level II
- Double jacketed - PVC
- CMR (Riser) rated
- Shielded and Unshielded - solid and stranded cables are available

UL/NEC Ratings	Pair Count	Jacket Color	Packaging	Conductor	Shielding	Figure	Part Number	Weight lbs/kft	Vp (%nom)	Dimensions (in) Dielectric Outside
CMR	4	Grey	WR	Solid	UTP	A	1499447-3	30.0	71	0.018 0.250
					FTP	B	1499449-3	31.5	71	0.030 0.250
				Stranded	UTP	C	1499448-3	34.0	67	0.018 0.260
					ScTP	D	1499450-3	45.0	67	0.018 0.305

*Note: Dimensions reference outer jacketing.

EtherSeal Modular Jack Outlet Kits



- Meets or exceeds TIA and ISO component performance requirements
- IP67 Compliant
- Available for Shielded and Unshielded Systems
- Traditional 110 tool and toolless versions
- Front-loading into enclosures and outlets
- Push-On and Twist Off Mating Action
- Blind mate with Polarized Keying
- Tactile feedback confirms fully mated
- Optional Outlet Cap with tether available

Description	Figure	Category	Part Number
XG Category 6A AMP-TWIST Shielded Modular Jack Kit	—	6A	1933589-2
SL Series 110Connect Unshielded Modular Jack Kit	A	6 5e	1479565-2 1479563-2
SL Series 110Connect Shielded Modular Jack Kit	B	6 5e	1479566-2 1479564-2
Modular Jack Cap	C	—	1479591-2
Positive Latching Modular Jack Cap	—	—	1479861-1

EtherSeal Modular Coupler Outlet Kits

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- Meets or exceeds TIA and ISO component performance requirements
- IP67 Compliant
- Available for Shielded and Unshielded Systems
- Front-loading into enclosures and outlets
- Push-On and Twist Off Mating Action
- Blind mate with Polarized Keying
- Tactile feedback confirms fully mated
- Optional Outlet Cap with tether available

Description	Category	Shielding	Figure	Part Number
SL Series Modular Coupler Kit	5e	Unshielded	A	1479599-2
		Shielded		1479600-2
Modular Jack Cap			B	1479591-2
Positive Latching Modular Jack Cap				1479861-1

EtherSeal Modular Plug Kits



- Meets or exceeds TIA and ISO component performance requirements
- IP67 Compliant
- Available for Shielded and Unshielded Systems
- Available for solid and stranded cable
- Push-On and Twist Off Mating Action
- Blind mate with Polarized Keying
- Tactile feedback confirms fully mated
- Optional Plug Cap with available tether
- Category 6 Modular Plug Kit can be used for either shielded or unshielded applications.

Description	Category	Shielding	Figure	Part Number
Modular Plug Kit	6	Unshielded	A Solid	1479682-2
			B Stranded	1479683-2
		Unshielded	C Solid	1479583-2
			D Stranded	1479584-2
	5e	Shielded	E Solid	1479585-2
			F Stranded	1479586-2
Modular Plug Cap			G	1479592-2

EtherSeal Category 5e Patch Cable Assemblies



- Meets or exceeds TIA and ISO component performance requirements
- IP67 Compliant
- Utilizes EtherSeal, industrial grade Cat 5e cable
- Factory-terminated and tested for quality
- Both EtherSeal to EtherSeal and EtherSeal to standard modular plug versions available
- Push-On and Twist Off Mating Action
- Blind mate with Polarized Keying
- Tactile feedback confirms fully mated
- Optional Plug Cap with tether available

Connector End A	Connector End B	Shielding	3 ft [0.91 m]	5 ft [1.52 m]	7 ft [2.13 m]	10 ft [3.04 m]	15 ft [4.57 m]
EtherSeal RJ45 Modular Plug	EtherSeal RJ45	Unshielded	1479601-3	1479601-5	1479601-7	1-1479601-0	1-1479601-5
	Modular Plug	Shielded	1479603-3	1479603-5	1479603-7	1-1479603-0	1-1479603-5
	Standard RJ45	Unshielded	1479602-3	1479602-5	1479602-7	1-1479602-0	1-1479602-5
	Modular Plug	Shielded	1479604-3	1479604-5	1479604-7	1-1479604-0	1-1479604-5

OVDA Duplex LC Receptacles and Plugs

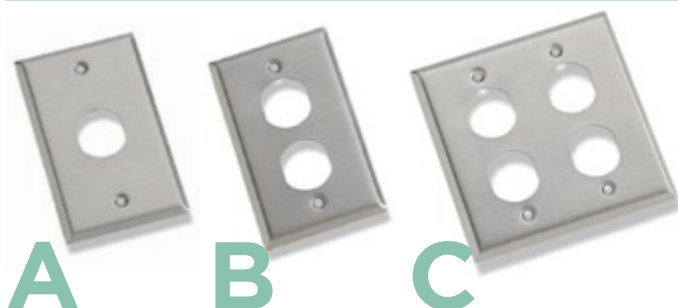


- Meets or exceeds TIA and ISO component performance
- IP67 compliant
- Bayonet style latching
- Multimode and Single-mode
- Epoxy/polish LC connector with plug kit

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Description	Figure	Part Number
OVDA Duplex LC Receptacle, Multimode	A	1828619-1
OVDA Duplex LC Receptacle, Single-mode		1828619-2
OVDA Duplex LC Receptacle Dust Cap	B	1918177-1
OVDA Duplex LC Plug, Multimode		1828618-1
OVDA Duplex LC Plug, Single-mode	C	1828618-2
OVDA Duplex LC Plug Dust Cap	D	1828740-1

EtherSeal Stainless Steel Faceplates

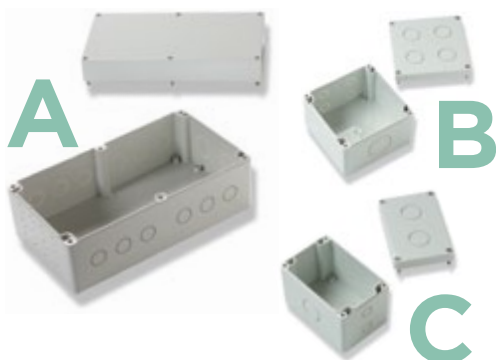


Gasketing Detail

- Available in single and double gang
- Accepts EtherSeal Jack or Coupler Kits (purchased separately)
- Available with and without sealing gaskets

Description	Port Count	Figure	With Gasket	Without Gasket
Single Gang	1	A	1479593-2	1479593-1
	2	B	1479594-2	1479594-1
Double Gang	4	C	1479595-2	1479595-1

EtherSeal Enclosures



Gasketing and Retention Screw Detail

- NEMA 6 and 6P rated
- IP67 compliant when installed per instruction sheets
- Can be used in either indoor or outdoor environments
- Provides fully sealed remote access to data and telephone services
- Knockouts provide easy configuration for customer requirements
- Knockouts per enclosure as listed
- Cable and conduit glands provide a way to seal cable and or conduit entries

Description	EtherSeal	Knockouts			Figure	Part Number
		Cable M16	Conduit M32	Conduit M40		
Enclosure, Indoor/Outdoor	12	12	—	2	A	1479654-1
	4	4	—	1	B	1479655-1
	2	2	1	—	C	1479656-1

EtherSeal Cable & Conduit Glands

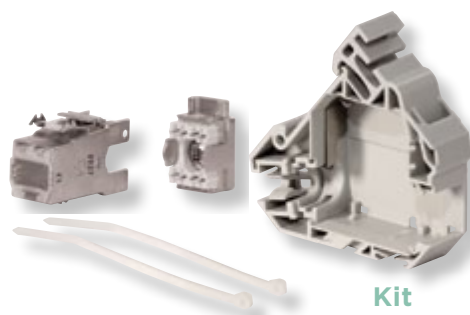
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- Cable and conduit glands provide a way to seal cable and or conduit entries into EtherSeal Connector Enclosures

Description	Gland Size	For use with	Figure	Part Number
Gland Kits	M16	Cable	A	1479657-1
	M32	¾ in Conduit	B	1479658-1
	M40	1 in Conduit	C	1479659-1

DIN Rail Adapters Kits



On DIN Rail



- Fit standard DIN rails used for mounting industrial control equipment and circuit breakers
- One XG Category 6A AMP-TWIST shielded modular jack with dust cover is included with each DIN adapter kit
- DIN adapter kits stack on top of each other for space savings
- Covers for end facing adapters are sold separately

Description	Part Number
DIN Rail Adapter Kit (Includes XG Cat 6A AMP-TWIST Shielded Modular Jack with Dust Cover)	1711501-1
DIN Rail Adapter Covers (Includes Left and Right Covers)	1711658-2

IP44 Industrial Wall Outlet



Back Detail

- IP44 outlet kit features a built-in lock and includes one pair of keys (each kit is equipped with a uniquely keyed lock)
- Spray water proof (see page 2)
- 2-Port outlet for industrial and semi-industrial environments
- Outlet is provided unloaded and accepts two SL Series jacks or Category 6A AMP-TWIST modular jacks
- Robust and ball-safe housing
- Lock kits include six locks with identical keying to reduce the number of keys required in larger installations
- Each outlet is light grey (RAL 7035)

Description	Part Number
IP44 Outlet (unloaded)	1711854-1
Set of Six Identical Locks with Keys	1711554-1

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Chapter Summary

Outlet connectivity can be standards based and customized according to the needs of the home owner for added value.

Connectivity panels contain the modules and ports for distribution of voice and data signals to room outlets. All are available in Category 5e, Category 6 and Category 6A.

AMP NETCONNECT Home Net-Works Systems passive video modules provide a flexible and easy method for distributing high-quality RF signals throughout an installed AMP NETCONNECT Home Net-Works System coaxial distribution system. AMP NETCONNECT Home Net-Works System video modules feature push-pin latch installation; just put the video module into place on the mounting grid and press the push-pins in to mount.

Section Facts

- Color-coded plug-and-play patching: any outlet port can be easily configured for any application (voice, data, fax, etc.)
- High Speed Shielded/ Unshielded Cat 5e, Cat 6, Cat 6A or Fiber performance
- Aesthetic value: neat, organized, flexible
- Fast, effective terminations: with 110 punch-down technology that reduces labor and produces high-performance connections
- Everything needed to design and deliver a true structured cabling for voice, data, video and audio in modern homes

Planning Steps

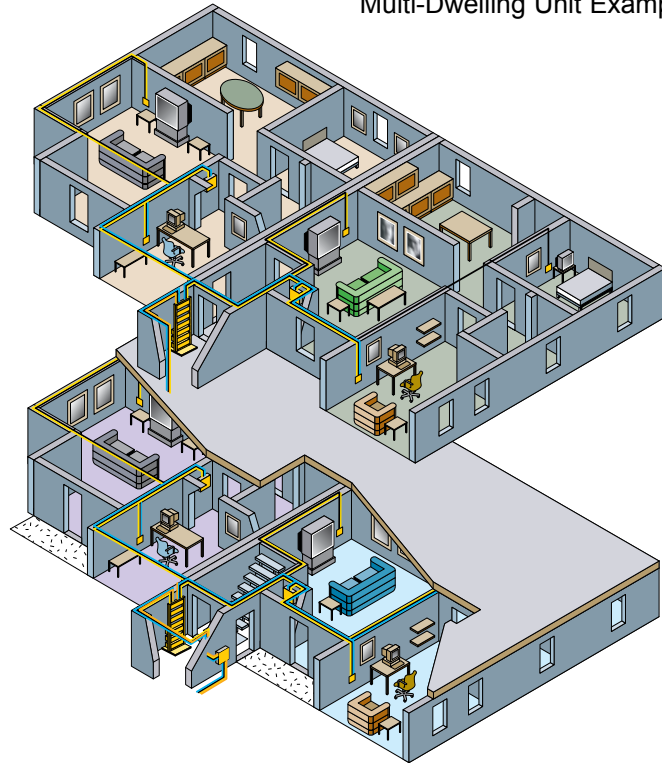
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1. Select outlet locations and configurations (TIA-570-B recommends either a one modular jack/one coaxial port, or a two modular jack/two coaxial port outlet configuration — custom outlet configurations are available as intermediate/alternate solutions).
2. Calculate total number of outlet and service cables needed, and lengths required.
3. Select Cat 5e or Cat 6 (TIA-570-B recommends Category 6) connectivity panel(s) and video module(s) to support outlets and desired capabilities.
4. Select appropriate Media Convergence Center to accommodate connectivity panels and modules.

Design Considerations & Recommendations

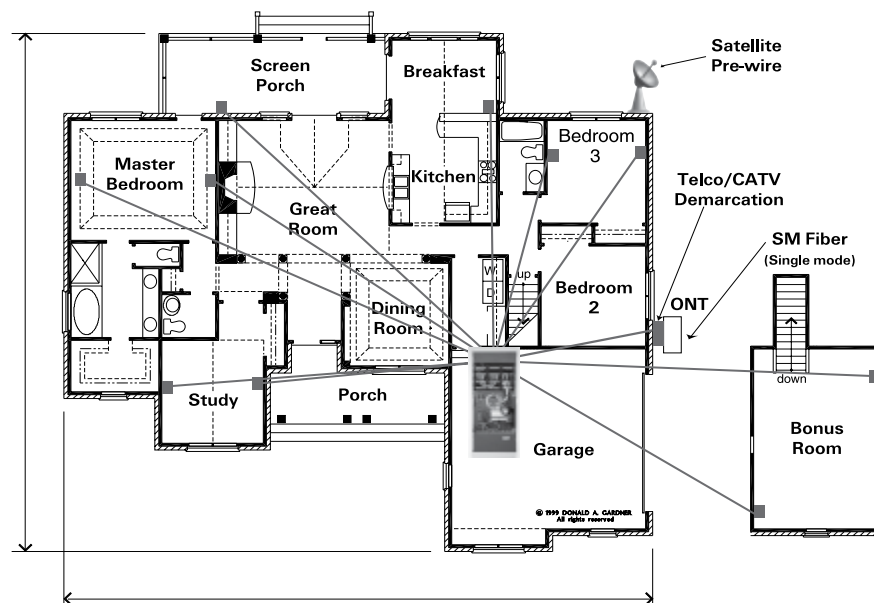
- A minimum of one outlet location should be cabled in each of the following rooms:
 - Kitchen
 - Bedroom
 - Family/Great Room
 - Den/Study
- Cables should be home run from outlets to the Media Convergence Center (MCC).
- The MCC should be centrally located in a climate-controlled location to minimize cable run lengths.
- Minimum recommended service cables to the MCC:
 - Two (2) Cat 5e/6
 - Two (2) RG6
 - Four (4) RG6 from digital satellite dish mounting location for Single Dwelling Units (SDUs)
- A 120VAC, 15A non-switchable duplex electrical outlet should be provided within the MCC.

Multi-Dwelling Unit Example



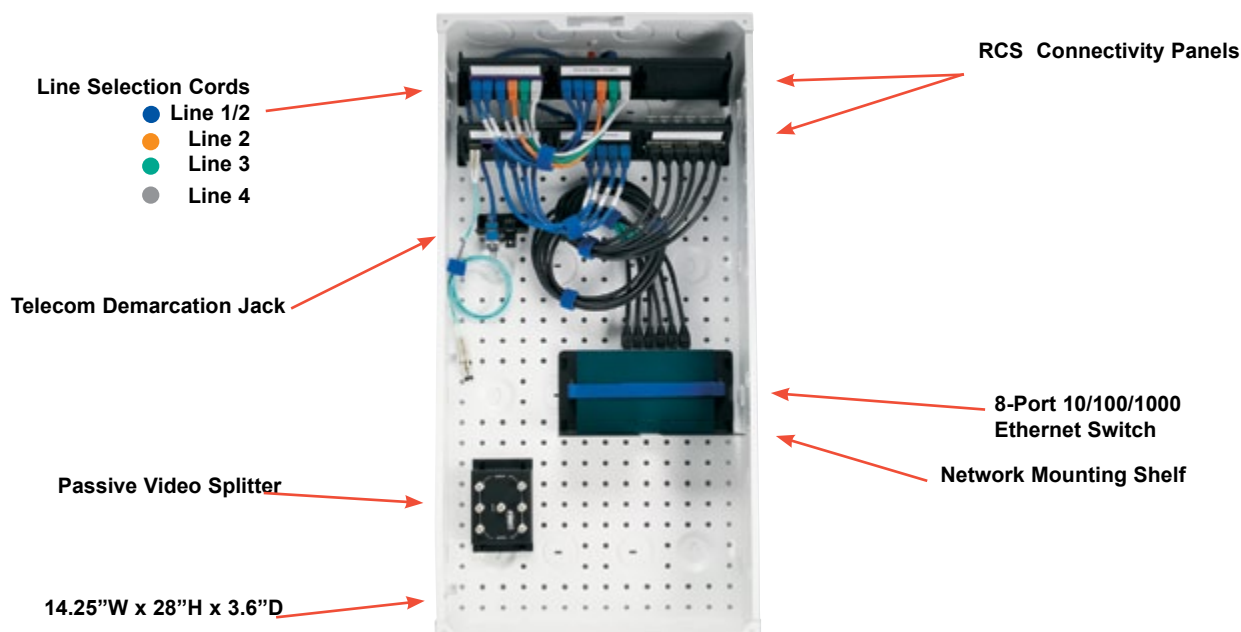
Design Considerations - FTTH

Typical System Layout

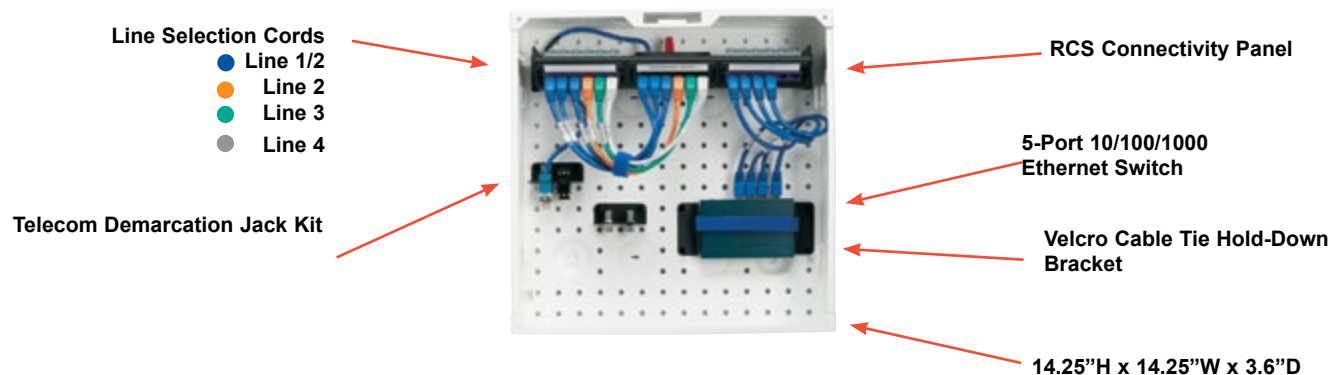


RCS 28 Information

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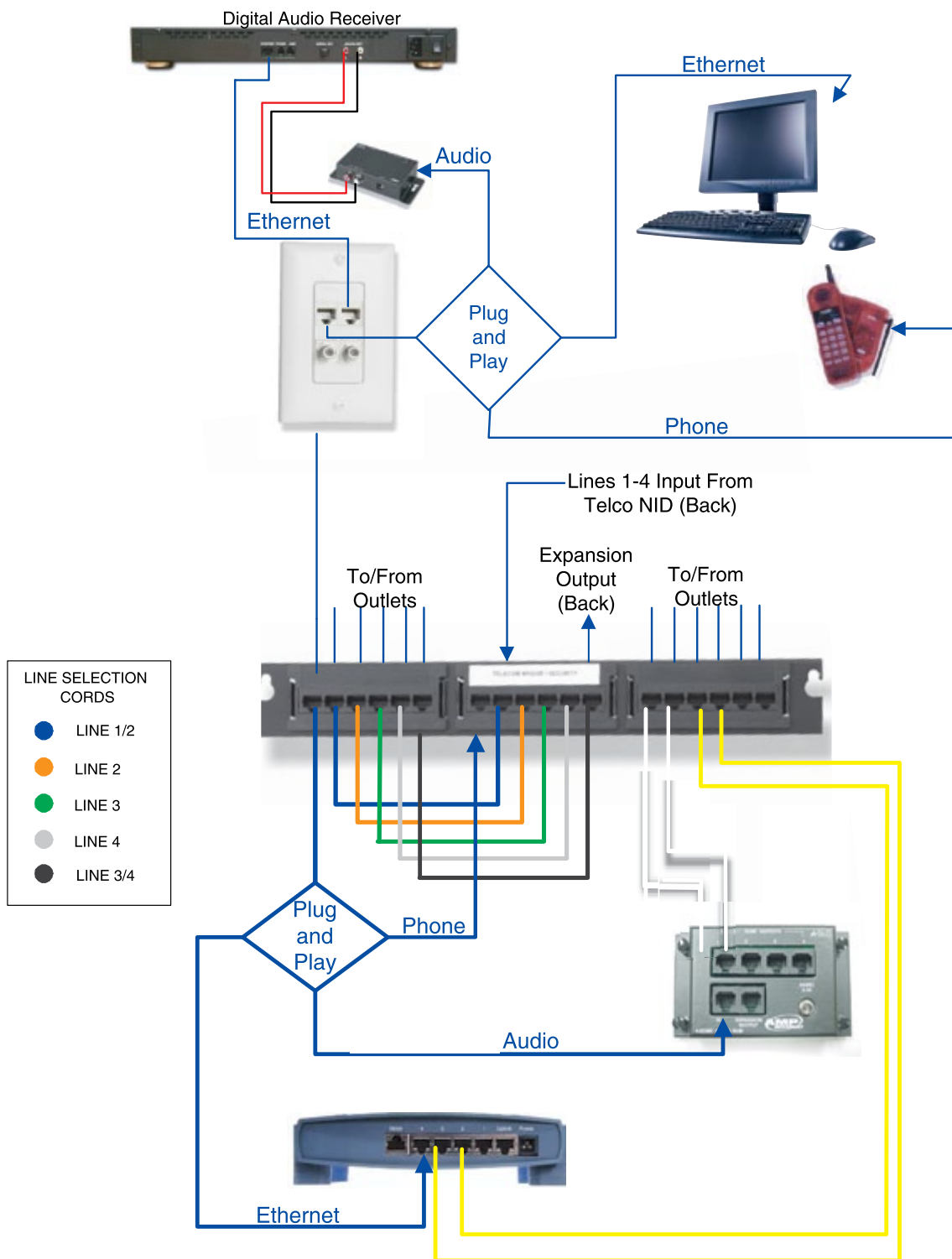


RCS 14 Information



Passive Video Module Performance (Page 19-10)

Parameter	Frequency (MHz)	1 GHz Passive Video Modules	
		1x6	1x8
Insertion Loss (dB)	5 – 50	9.2	10.3
	50 – 500	9.8	10.6
	500 – 750	10.5	11.5
	750 – 1000	11.0	12.5
Return Loss (dB)	5 – 50	16.0	18.0
	50 – 500	20.0	18.0
	500 – 750	20.0	20.0
	750 – 1000	18.0	18.0
Isolation (dB)	5 – 50	25.0	25.0
	50 – 500	25.0	25.0
	500 – 750	23.0	23.0
	750 – 1000	20.0	20.0
Connector Type		Female F-Connector	Female F-Connector
Impedance (Ohms)		75	75
DC Pass		All Ports	All Ports
RFI (dB)		>130	>130



Outlet Cable



- Recommendations:
 - Blue for voice applications
 - Yellow for data applications
 - White for audio applications
- Cable comes in 1000 ft. reels
- Cables are Non-plenum (CMR) Rated

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Description	Figure	Jacket Color		
		White	Blue	Yellow
Cat 5e Cable	A	219538-2	219538-6	219538-8
Cat 6 Cable	B	219560-2	219560-6	219560-8
Cat 6A Cable	C	4-1499389-1	4-1499389-5	4-1499389-7

Outlet Faceplates and Straps



Description	Figure	Color					
		Almond	Black	White	Gray	Electrical Ivory	Alpine White
Wall Mount Phone Faceplate	A	1479152-1	1479152-2	1479152-3	1479152-4	1-1479152-1	–
1-Port Faceplate	B	2111021-1	2111021-2	2111021-3	2111021-4	1-2111021-1	1-2111021-3
2-Port Faceplate	C	2111022-1	2111022-2	2111022-3	2111022-4	1-2111022-1	1-2111022-3
3-Port Faceplate	D	2111023-1	2111023-2	2111023-3	2111023-4	1-2111023-1	1-2111023-3
4-Port Faceplate	E	2111024-1	2111024-2	2111024-3	2111024-4	1-2111024-1	1-2111024-3
6-Port Faceplate	F	2111025-1	2111025-2	2111025-3	2111025-4	1-2111025-1	1-2111025-3
Single Gang SL Series Faceplate	G	1339118-1	1339118-2	1339118-3	1339118-4	1-1339118-1	–
2-Port Duplex Strap	H	1116618-1	1116618-2	1116618-3	1116618-4	1-1116618-1	–
4-Port Duplex Strap	I	1339120-1	1339120-2	1339120-3	1339120-4	1-1339120-1	–
2-Port Decorator Strap	J	1479784-1	1479784-2	1479784-3	1479784-4	1-1479784-1	–
3-Port Decorator Strap	K	1116616-1	1116616-2	1116616-3	1116616-4	1-1116616-1	–
4-Port Decorator Strap	L	1479504-1	1479504-2	1479504-3	1479504-4	1-1479504-1	–
Decorator Faceplate	M	1479159-1	1479159-2	1479159-3	1479159-4	1-1479159-1	–
Double Gang Decorator Faceplate	N	1479625-1	1479625-2	1479625-3	1479625-4	1-1479625-1	–
Duplex Faceplate	O	1479160-1	1479160-2	1479160-3	1479160-4	1-1479160-1	–

Outlet Jacks and Inserts

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Description Termination Style Dust Cover Option Color	SL Series Category 6 Modular Jacks		SL Series Category 5e Modular Jacks			
	110 Termination		110 Termination		Toolless Termination	
	No Dust Cover	With Dust Cover	No Dust Cover	With Dust Cover	No Dust Cover	With Dust Cover
	A	B	A	B	C	D
Almond	1375055-1	1375187-1	1375191-1	1375190-1	1116604-1	1339189-1
Black	1375055-2	1375187-2	1375191-2	1375190-2	1116604-2	1339189-2
White	1375055-3	1375187-3	1375191-3	1375190-3	1116604-3	1339189-3
Gray	1375055-4	1375187-4	1375191-4	1375190-4	1116604-4	1339189-4
Orange	1375055-5	1375187-5	1375191-5	1375190-5	1116604-5	1339189-5
Blue	1375055-6	1375187-6	1375191-6	1375190-6	1116604-6	1339189-6
Red	1375055-7	1375187-7	1375191-7	1375190-7	1116604-7	1339189-7
Yellow	1375055-8	1375187-8	1375191-8	1375190-8	1116604-8	1339189-8
Green	1375055-9	1375187-9	1375191-9	1375190-9	1116604-9	1339189-9
Violet	1-1375055-0	1-1375187-0	1-1375191-0	1-1375190-0	1-1116604-0	1-1339189-0
Electrical Ivory	1-1375055-1	1-1375187-1	1-1375191-1	1-1375190-1	1-1116604-1	1-1339189-1
Alpine White	1-1375055-3	1-1375187-3	1-1375191-3	1-1375190-3	—	—

Description	Figure	Color					
		Almond	Black	White	Gray	Electrical Ivory	Alpine White
Blank Insert		1116412-1	1116412-2	1116412-3	1116412-4	1-1116412-1	1-1116412-3
F-Connector Insert	E	1499855-1	1499855-2	1499855-3	1499855-4	1-1499855-1	1-1499855-3
RCA 110 Jack (red)	F	1479230-1	1479230-2	1479230-3	1479230-4	1-1479230-1	1-1479230-3
RCA 110 Jack (white)		1479231-1	1479231-2	1479231-3	1479231-4	1-1479231-1	1-1479231-3
RCA 110 Jack (yellow)		1479232-1	1479232-2	1479232-3	1479232-4	1-1479232-1	1-1479232-3
S-Video 110 Jack	G	—	1375149-2	—	—	—	—
Speaker Post (black)		1479190-1	1479190-2	1479190-3	1479190-4	1-1479190-1	1-1479190-3
Speaker Post (red)	H	1479191-1	1479191-2	1479191-3	1479191-4	1-1479191-1	1-1479191-3
USB A-A Coupler	I	1933659-1	1933659-2	—	—	—	1-1933659-3
USB B-A Coupler	J	1933661-1	1933661-2	—	—	—	1-1933661-3
HDMI Coupler		—	2111500-2	—	—	—	—

Description	Figure	Color				
		Almond	Black	White	Gray	Electrical Ivory
*HDMI Module with Cable, 1 Unit	K	1933800-1	1933800-2	1933800-3	1933800-4	1-1933800-1
*HDMI Adapter, 1 Unit	L	1933801-1	1933801-2	1933801-3	1933801-4	1-1933801-1

*NOTE: Use with SL Series Faceplates, additional modules listed in Chapter 3

Description	Fiber Type	Housing and Coupler Color	Figure	Part Number
LC Coupler, APC Polish	Single-mode	Green		1933286-3
	Single-mode	Blue	M	1933286-4
LC Coupler	XG 50/125um (OM3)	Aqua		1933286-6
	50/125um	Black		1-1933286-1

NOTE: Unless otherwise noted, optical fiber couplers are for Ultra Polish Connectors (UPC).

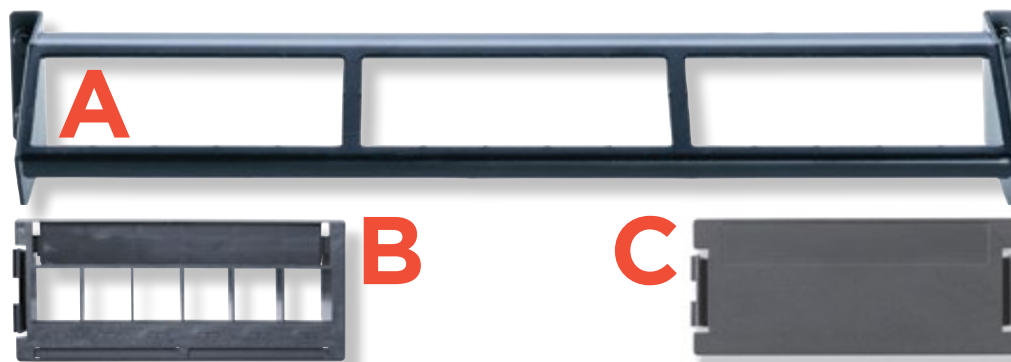
Category 6A AMP-TWIST Shielded Modular Jacks

19



Description	Wiring Pattern	Part Number
Rear Entry Modular Jack	T568A/T568B	without Dust Cover
		with Clear Dust Cover
		1711342-2
		1711160-2

Unloaded Connectivity Panel & Accessories



- Accepts the following front loadable snap-in modules:
- 2111117-1, SL Interface Housing
- 2111093-1, Shielded SL Interface Housing
- 1479698-1, Blank Filler
- 1479700-1, Cat 5e Connectivity Module
- 1479701-1, Standard Telecom Bridge Module
- 1479702-1, Telecom Bridge/Security Module
- 1479703-1, DSL/Security Module
- 1479865-1, 110 Telecom Bridge Module

Description	Figure	Part Number
Unloaded Connectivity Panel	A	1933693-1*
Unloaded Connectivity Panel, Shielded		1933776-1*
Connectivity Panel with 3 SL Series Shielded Housings		1933776-2*
Unloaded SL Interface Housing	B	2111117-1
SL Series Shielded Interface Housing		2111093-1
Blank, SL Series Housing (Filler)	C	1479698-1

*NOTE: Panel used with 1933691-1, 1933837-1, 1933692-1 and 1933838-1 RCS MCC enclosures only.

Standard Telecom Bridge



- Six ports – four lines per port
- For basic telephone, fax and dial-up modem services
- Bridge four incoming lines to six output ports
- Expansion port allows additional bridging modules to be added
- 1 ft Cat 5e Expansion cord, 1499112-1

Description	Part Number
Front-Loadable Standard Telecom Bridge	1479701-1

Telecom Bridge/Security



Front



Back

RJ31 Plug



- 6 ports – 4 lines per port
- Expansion port
- RJ31 security interface port
- For basic telephone, fax and dial-up modem service
- Includes RJ31 shorting plug
- RJ31 plug loops line 1 back to panel if no security system currently is installed

Description

Front-Loadable Telecom Bridge/Security Module

Part Number

1479702-1

DSL/Security Module



Front



Back

- Line 1 DSL output & filtered input ports
- Filtering accomplished by connecting a filtered phone output from DSL modem or optional in-line DSL filter to DSL Security Module DSL-IN port
- RJ31 security interface port
- For splitter-less DSL applications
- Includes RJ31 shorting plug and RJ14 telco jumper cord

Description

Front -Loadable DSL/Security Module

Part Number

1479703-1

Cat 5e Connectivity Module



Front



Back

- 6-port, RJ45 Cat 5e
- 110 punch down
- Voice or data applications
- Supports Gigabit Ethernet

Description

Front-Loadable Cat 5e Connectivity Module

Part Number

1479700-1

110 Telecom Bridge Module

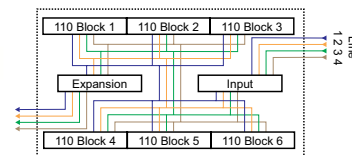


Front



Back

- 110 Punch down termination
- 4 lines x 7 outputs
- For basic analog phone, fax and dial-up modem



Description

110 Telecom Bridge Module

Part Number

1479865-1

RCS SL Connectivity Starter Kit



- Provides an 18-port panel with:
 - Two (2) SL interface housings and (12) SL 110 jacks
 - One (1) 6-port telecom bridge/security module (4 lines per port) with RJ31 port for security panel
 - Six (6) Cat 5 4-pair 568A cables, blue, 1 ft
 - Two (2) Line 2 telecom cables, orange, 1 ft
 - 8" hook & loop cable tie, blue
- Terminate up to 12 Cat 5e/6 cables
- Any 6 outlet ports can be configured for 4-line phone
- All 12 ports can be configured for data

Description

RCS SL Connectivity Starter Kit

TIA/EIA Category

Category 5e
Category 6

Part Number

1933852-1
1933854-1

RCS SL Connectivity Expansion Panel



- Provides an 18-port panel with:
 - Two (2) SL interface housings and (12) SL 110 jacks
 - One (1) 6-port standard telecom bridge module (4 lines per port)
 - One (1) Cat 5 4-pair 568A expansion cable, blue, 1 ft
- Terminate up to 12 additional Cat 5e/6 cables
 - Any 6 outlet ports can be configured for 4-line phone
 - All 12 ports can be configured for data
- Patch cables available separately

Description

RCS SL Expansion Panel

TIA/EIA Category

Category 5e
Category 6

Part Number

1933853-1
1933855-1

Demarcation Jack Kit

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- Demarcation Kit includes:
 - Demarcation jack bracket
 - Cat 5e SL 110 Jack, blue
 - Cat 5e Patch Cable, blue, 2 ft
- Meets TIA/EIA-570-B requirements for Auxiliary Disconnect Outlet
- SL Series Bracket accepts (2) Cat 5e/6 SL Series Jacks for incoming data service demarcation
- Recommend blue jacks for voice and yellow for data

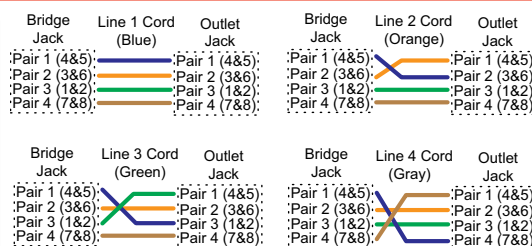
Description	Figure	Part Number
Demarcation Jack Kit	A	1479285-1
Demarcation Bracket (bracket only)	B	1479441-1

Patch Cords

- Standard patch cables for data patching and outlet connections

Description	Color	Length (ft)	Part Number
Cat 5e Patch Cord	Yellow	2	219246-2
	White	2	219245-2
Cat 5e Equipment Cord	White	8	219245-8
Cat 6 Patch Cord	Yellow	2	1933122-2
Cat 6 Equipment Cord	White	8	1933121-8
Cat 5 Equipment Cord	Blue	1	1479557-1

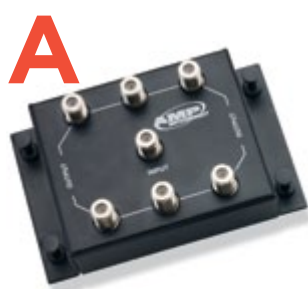
Telephone Line Designation Cords



- Designates primary line selection
- Line 1 is secondary for line cords 2 – 4

Description	Color	Part Number
Line 1/2 Telecom Cord	Blue	1479557-1
Line 2 Telecom Cord	Orange	1479004-1
Line 3 Telecom Cord	Green	1479005-1
Line 4 Telecom Cord	Gray	1479006-1

Passive Video Modules



- Passive video modules (PVMs) provide the capability to distribute one RF input to six to eight locations on an installed coaxial distribution system
- May also be used as combiners for multiple modulated RF sources
- DC passing all ports
- Feature either push-pin mounting (for mounting on equipment panels) or screw mounting (for mounting on backboards without mounting holes)

19

Description	Mounting Method	Inputs	Outputs	Frequency Range	Figure	Part Number
Passive Video Modules	Push-Pin	1	6	1 GHz (5 — 1000 MHz)	A	1479334-1
			8	1 GHz (5 — 1000 MHz)	B	1479335-1
	Screw (Direct Mount)	1	6	1 GHz (5 — 1000 MHz)	C	1375398-1
			8	1 GHz (5 — 1000 MHz)	D	1479372-1

Dual LNB Satellite/Coax Demarcation Module



- Provides a convenient means to distribute two satellite LNB inputs to any two outlet coax ports for digital satellite service
- Provides convenient demarcation for incoming coaxial cable

Description	Part Number
Dual LNB Satellite/Coax Demarcation Module	1479338-1

Coax Patch Cables



- Flexible 75 Ohm mini-coax patch cables provide convenient means for patching between video patch panel and video distribution modules
- Typical loss <1dB (from 5 – 1000 MHz)

Description		Length	Figure	Part Number
RG59 Mini-Coax	Black	36"	A	1479007-1
		18"	A	1479008-1
Patch Cable	White	18"	B	1479009-1

RCS14 Media Convergence Center

19

20 AWG steel with white powder coat

Multiple knockouts on all surfaces

Versatile mounting grid for multiple connectivity panels and modules

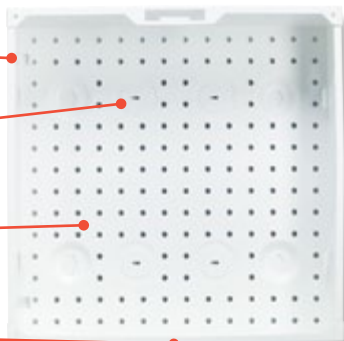
Two (2) knockouts for duplex electrical boxes

20 AWG steel with white powder coat

Beveled edge for safety & aesthetics

Screw on cover

A

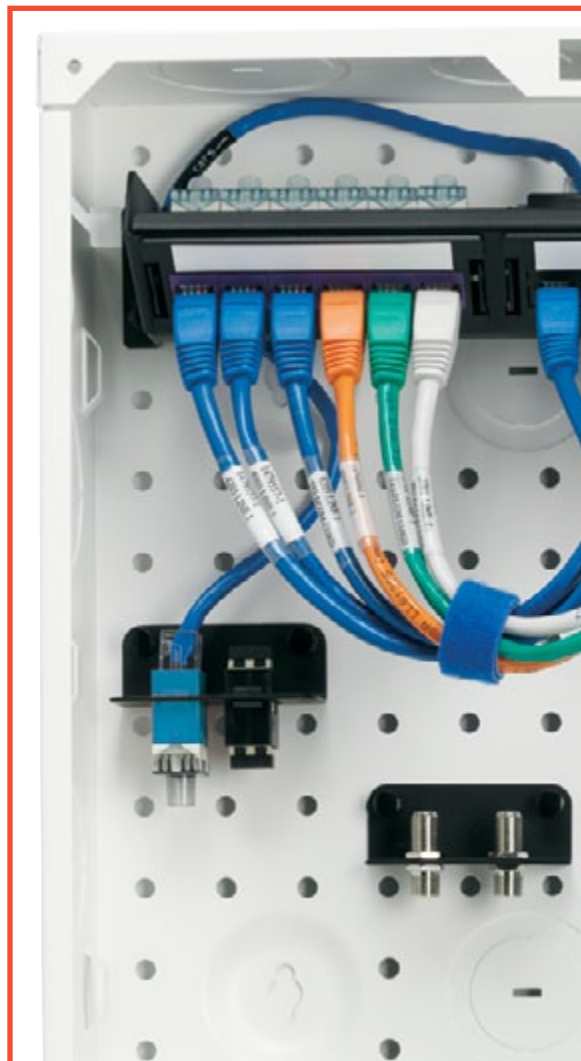


B



Lock for added security

Close-up of loaded MCC



Description	Dimension	Figure	Part Number
RCS14 Enclosure with screw-on Cover			1933691-1
RCS14 Enclosure without Cover	14.3 in H x 14.3 in W x 3.6 in D	A	1933837-1
RCS 14 Hinged Lockable Cover		B	1933694-1

RCS28 Media Convergence Center

20 AWG steel with white powder coat
Multiple knockouts on all surfaces
Versatile mounting grid for multiple connectivity panels and modules

Two (2) knockouts for duplex electrical boxes

A

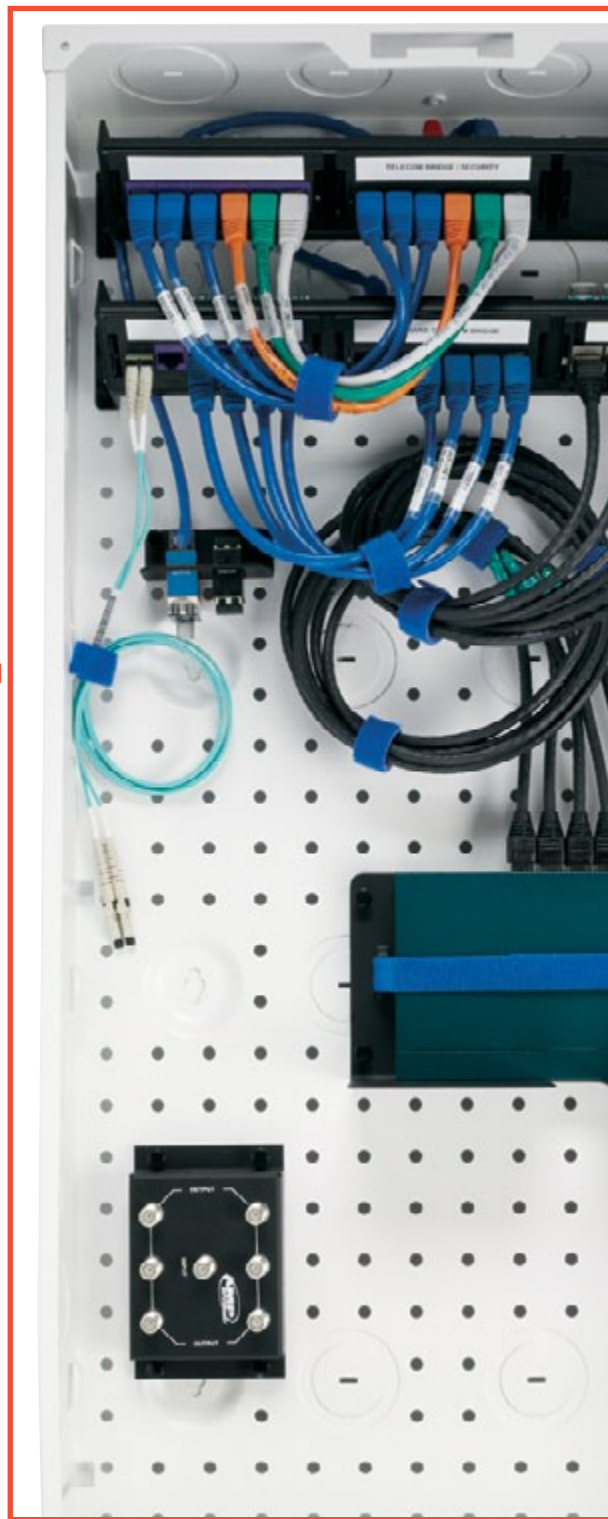
Lock for added security

20 AWG steel with white power coat

Beveled edge for safety & aesthetics

B

Close-up of loaded MCC



19

Description	Dimension	Figure	Part Number
RCS28 Enclosure with screw on Cover			1933692-1
RCS28 Enclosure without Cover	28.0 in H x 14.3 in W x 3.6 in D	A	1933838-1
RCS28 Hinged, Lockable Cover		B	1933695-1

Media Convergence Center Accessories

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- Equipment Mounting Shelf accommodates network electronics such as Cable/DSL modems, routers, and switches (Recommended for RCS28)
- Velcro cable tie hold-down bracket is used to secure network electronics, such as Cable/DSL routers (sold separately)

Description

Velcro Cable Tie Hold-Down Bracket

Figure

A

Part Number

1479440-1

Network Shelf

B

1479437-1

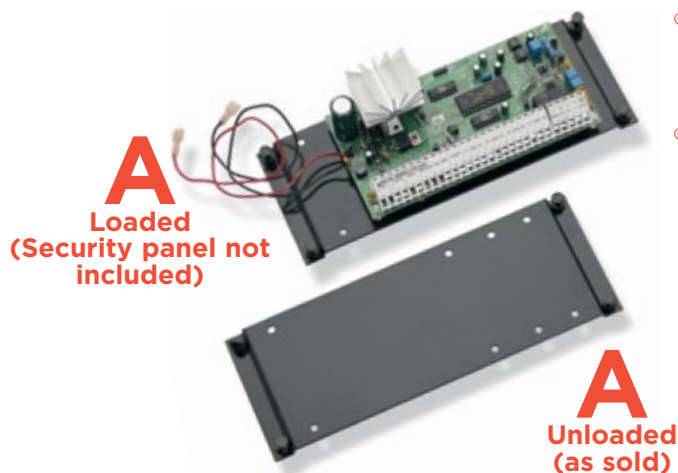
Velcro Cable Ties



- For 8 in and 12 in ties, an order quantity of one equals one roll of ten (10) ties

Description	Figure	Color								
		Black	White	Gray	Orange	Blue	Red	Yellow	Green	Violet
1 x 8 in	A	1375253-2	1375253-3	1375253-4	1375253-5	1375253-6	1375253-7	1375253-8	1375253-9	1-1375253-0
1 x 12 in	A	1375254-2	1375254-3	1375254-4	1375254-5	1375254-6	1375254-7	1375254-8	1375254-9	1-1375254-0
5/8 in x 5 yds	B	1375255-2	1375255-3	1375255-4	1375255-5	1375255-6	1375255-7	1375255-8	1375255-9	1-1375255-0

Security Panel Mounting Accessories



- DSC security mounting bracket:
 - Mounts directly to the back of the RCS14 and RCS28
 - Accommodates the following DSC security modules: PC580HS, PC1555HS, PC5010HS, PC5020HS, PC5204, PC5580TC
- 50-Pair wiring block mounting bracket:
 - 50-Pair wiring block without legs purchased separately (see Chapter 03)



50-Pair wiring block without legs not included, see Chapter 03

Description

DSC Security Mounting Bracket

Figure

A

Part Number

1479518-1

50-Pair Wiring Block Mounting Bracket

1479518-2





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Chapter Summary

The AMP NETCONNECT undercarpet cabling system is a low profile, flexible system that makes even the most complex cabling job in office, retail, or gaming environments simple, economical and beautifully invisible. The cabling to provide power, voice and data services to your equipment can be handled with ease - from desk lights to network connections. And it's interchangeable! If changes are required after the initial installation, don't worry about the cabling. You can change it to fit your new requirements just about as easily as you move the furniture or retail display fixtures.

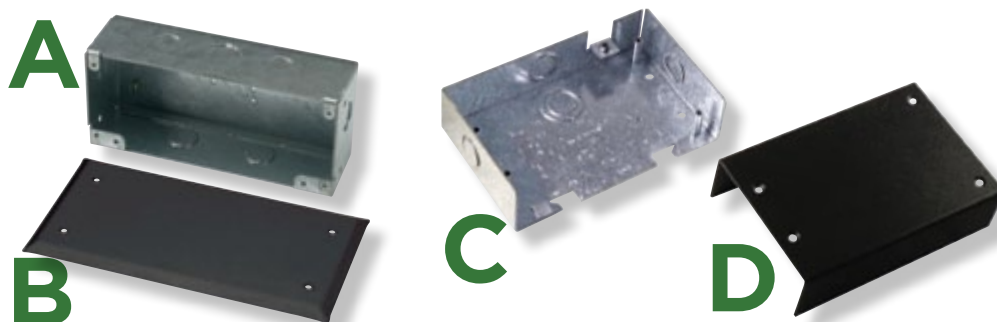
Take up a few sections of carpet squares, change the routing of the undercarpet cables and relocate the floor fittings. Presto! You're back in business. With this system, all your power, voice and data networks can be routed virtually anywhere under the carpet without the restrictions encountered with under-floor ducts, walls, partitions and power/data poles.

Section Facts

- Ideal for retail, gaming or office applications
- Economical alternative to power poles or trenching
- Eliminates the need to disturb or access adjacent stores in shopping locations to gain access to pull cables
- Provides better control of quality and work schedule
- UL Listed and CSA Certified
- Approved for use per NEC Article 324 and CEC Article 12-800
- Power available in 3 and 5 circuit design
- Isolated ground circuit cable and components available
- Category 5e and 6 cable to support voice/data applications
- Designed for use with carpet squares for accessibility to make system changes easy as requirements change
- Pre-packaged kits available for "store-in-a-box" concept
- Components design provides simple termination from undercarpet cable to round wire
- Suitable for use in slab-on-grade, first floor areas
- Use in open lobby, customer reception, or other areas where traditional cabling methods won't reach

Transition Boxes and Covers

20



- Holds transition block used to transition from round cable to undercarpet power cable
- Power transition block must be ordered separately
- Transition boxes and covers can be ordered separately or as a kit
- Transition boxes may be used with communications transition blocks

Mounting	Component	Figure	Color	Part Numbers
Flush, Wall Mounting	Box	A	–	554805-1
	Cover	B	Black	1-553292-1
			Gray	1-553292-3
	Kit (Includes Box and Cover)		Black	1375045-1
			Gray	1375045-3
Surface, Wall Mounting	Box	C	–	1375033-1
	Cover	D	Black	1375034-1
			Gray	1375034-3
	Kit (Includes Box and Cover)		Black	1375032-1
			Gray	1375032-3

Power Transition Block



- Used to transition from round cable to 3 or 5-conductor undercarpet power cable

Description	Part Number
Power Transition Block	554862-1

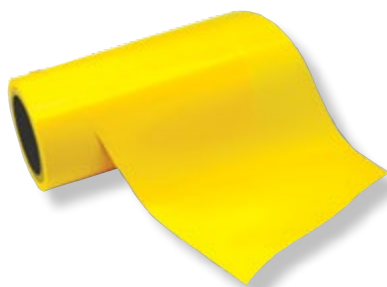
Power Whip Kits



- Used to transition from 3 or 5-conductor undercarpet to standard, round power cable at locations away from walls
- Includes power transition block
- Accepts AMPINNERGY power entry or line entry cable assemblies for easy interface between systems
- Accepts 0.5 in [12.7mm] fitting for conduit

Description	Color	Part Number
Power Whip Kit	Black	554181-1
	Gray	554181-3

Floor Preparation



- Yellow vinyl floor preparation
- Used with both 3 and 5-conductor undercarpet power cable
- Required for slab-on-grade installations
- Recommended for all installations
- Provides smooth, even surface for installation

20

Description	Width	Length on Roll	Part Number
Floor Preparation	8 in [203.2 mm]	50 ft [15.25 m]	554123-3
		100 ft [30.48 m]	554123-4
		250 ft [76.20 m]	554123-1

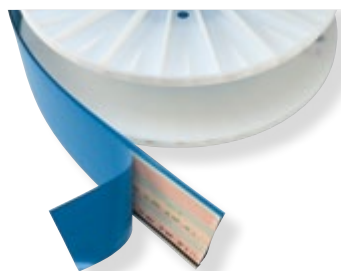
Top Shield



- Made of stainless steel
- Used with both 3 and 5-conductor undercarpet power cable
- Fully grounded component covering the entire system
- Protects the cable against penetration hazards
- Bonding clips are required to join two pieces of top shield together; bonding clips are sold separately (see page 5)

Description	Width	Length on Roll	Part Number
Top Shield	6.62 in [168.15 mm]	50 ft [15.25 m]	553536-3
		100 ft [30.48 m]	553536-4
		250 ft [76.20 m]	553536-1

Undercarpet Power Cable

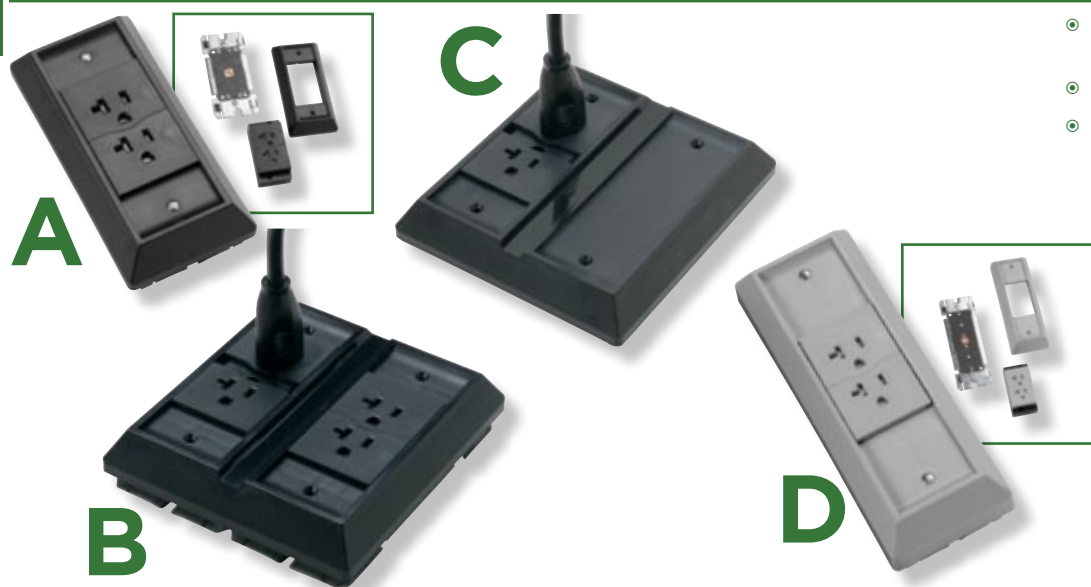


- Available in 3 and 5-conductor versions
- Also available in 10 AWG [5.29 mm²]
- Undercarpet cable with isolated ground is for use with sensitive computer equipment
- UL Listed, File Number: E73212
- CSA Certified, File Number: LR7189
- Flat conductor cable (Type FCC) permitted per Article 324 of the 2008 National Electrical Code (NEC) and Rule 12-800 of the Canadian Electrical Code (CEC)

Ground	Conductor Size	Number of Conductors	Conductor Colors	Width inches [millimeters]	Part Number		
					50 ft [15.25 m]	100 ft [30.48 m]	250 ft [76.20 m]
Standard	12 AWG [3.32 mm ²]	3	White, Green, Black	2.77 [70.36]	3-553079-3	3-553079-4	3-553079-1
		5	White, Green, Black, Blue, Red	4.62 [117.35]	3-553239-3	3-553239-4	3-553239-1
Isolated	12 AWG [3.32 mm ²]	5	White, Green, Black, Red, Green/Yellow	4.62 [117.35]	3-553820-3	3-553820-4	3-553820-1

Direct Connecting Receptacle (DCR) Kits

20

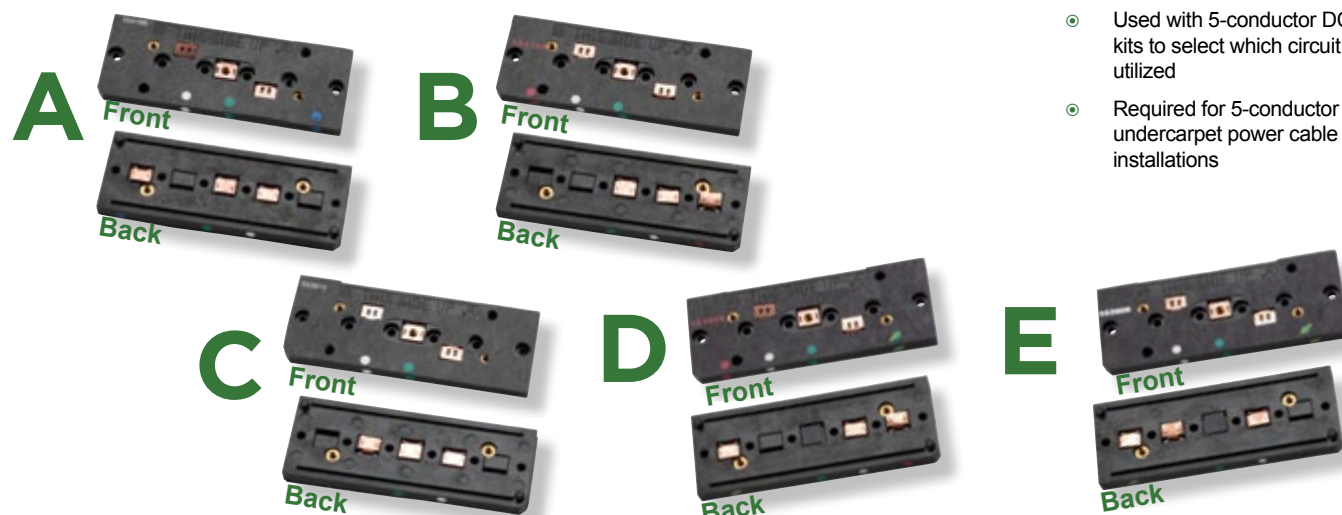


- Available in 3 and 5-conductor versions
- Rated at 125 VAC, 20 A
- 5-Conductor DCR Kits require a circuit adapter to select which circuit the DCR will be used on

Description	Height	Duplex Receptacles	Figure	Color	Part Numbers
DCR Kit For Use With 3-Conductor Undercarpet Power Cable	1 in [25.4 mm]	Single	A	Black	553947-1
				Gray	553947-3
		Double	B	Black	554192-1
				Gray	554192-3
		Single, with Dual Voice/Data Knockouts	C	Black	554142-1
				Gray	554142-3
DCR Kit For Use With 5-Conductor Undercarpet Power Cable	1.39 in [35.3 mm]	Single	D	Black	554186-1*
				Gray	554186-3*
DCR Kit For Use With 5-Conductor, Isolated Ground Undercarpet Power Cable	1.39 in [35.3 mm]	Single, Isolated Ground		Black	558650-1*
				Gray	558650-3*

*NOTE: 5-conductor DCR kits require circuit adapters (ordered separately).

Circuit Adapters for 5-Conductor DCR Kits



- Used with 5-conductor DCR kits to select which circuit is utilized
- Required for 5-conductor undercarpet power cable installations

Description	Ground System	Circuit Selected	Figure	Part Numbers
5-Conductor Circuit Adapter	Standard	Blue	A	554188-1
		Red	B	554189-1
		Black	C	553910-1
	Isolated Ground	Red	D	553908-1
		Black	E	553909-1

Power Cable Installation Tools and Accessories

20



- Taps allow additional undercarpet power runs to be added to undercarpet power circuits (connects two sections of undercarpet power cable)
- Splices allow two sections of undercarpet power cable to be joined to extend lengths of undercarpet power cable
- Taps and splices require the following components:
 - Tap or splice (one per undercarpet power cable conductor)
 - Hand tool
 - Insulator kit
 - Top shield
 - Top shield bonding clip (minimum of two per tap or splice)
 - Hold down tape
- Tap/splice hand tool crimps taps and splices securely to undercarpet power cable
- DCR removal requires floor fitting patch kit
- Floor fitting patch kit includes:
 - Insulator kit
 - top shield
 - top shield bonding clip
 - Hold down tape
- Spray adhesive is used to help seal the installation against residual moisture
- Hold down tape is used to install cable and top shield
- For more information on the use of these products see instruction sheets 409-5566 or 408-3150

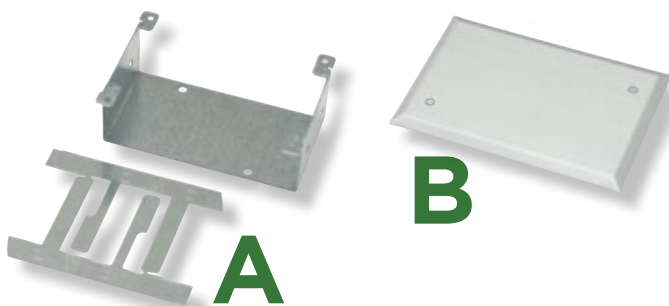
Description	Package Quantity	Figure	Part Numbers
Individual Tap	15	A	553455-2
Individual Splice	15	B	553454-1
Tap/Splice Hand Tool	1	C	91392-1
Top Shield Bonding Clip*	50	D	553534-1*
Stainless Steel Bonding Clip†	50		554178-1†
Insulator Kit	5	E	556411-1
Spray Adhesive	12		553453-1
Hold Down Tape, 180 ft [45.72 m]	1	F	6-553453-1
Floor Fitting Patch Kit	1	G	553481-1
		H	1479151-1

*NOTE: Top shield bonding clips (553534) are required for turns, taps and splices.

†NOTE: Stainless steel bonding clips (554178) can be used to replace lost DCR clips or for bonding top shield to transition boxes

Communications Transition Boxes and Covers

20



- Holds transition block used to transition from round cable to undercarpet communications cable
- Communications transition block must be ordered separately
- Transition boxes and covers must be ordered separately
- Power transition boxes may be used in place of communications transition boxes if desired; see part numbers 1375045 and 1375034 (Note: covers are not interchangeable)

Description	Figure	Part Numbers
Flush Wall Frame	A	553739-2
Flush Wall Frame Cover	B	553095-1

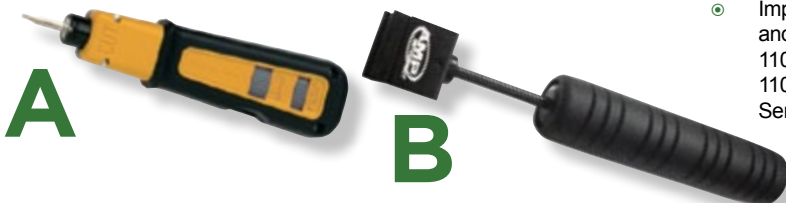
Communications Transition Blocks



- 110Connect transition blocks meet or exceed all TIA/ISO requirements for Enhanced Category 5 (Cat5e)/Class D performance
- 610XC transition blocks meet or exceed all TIA/ISO requirements for Enhanced Category 6 (Cat6)/Class E performance
- 110Connect blocks may be terminated using standard 110-style punch-down tools (AMP NETCONNECT part number 1375308-1)
- 610XC blocks may be terminated using standard 110-style punch-down tools (AMP NETCONNECT part number 1375308-1) or with 610XC 4-pair punch down tool (AMP NETCONNECT part number 1725062-1)

Description	TIA/EIA Category	Figure	Part Numbers
110Connect Transition Block	5e	A	1479384-1
610XC Transition Wiring Block	6	B	1479985-1

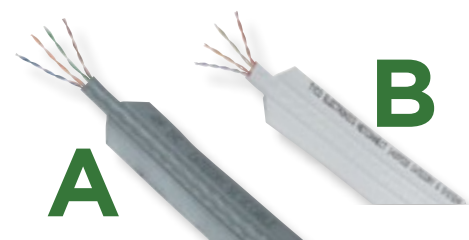
Punch-down tools



- Impact tool includes blade and can be used with all 110-style terminations including 110Connect, 610XC, and SL Series modular jacks
- 610XC 4-pair punch down tool if for use with 610XC Cross-connects and is used to punch down 610XC 4-pair connecting blocks onto 610XC wiring blocks

Description	Figure	Part Numbers
Pro Impact Tool with Extended-life Blade	A	1375308-1
610XC 4-Pair Punch-down Tool	B	1725062-1

Undercarpet Communications Cable



- Available on reels of 250 ft [76.2 m]
- Exceeds TIA/EIA and ISO specifications for Categories specified
- Exceeds all requirements for Gigabit Ethernet
- Independently verified by Intertek ETL SEMKO testing services
- UL Listed; UL Type CMUC
- CSA Certified; CSA Type CMH
- Lead-free jacketing

Description	TIA/EIA Category	Length per Reel	Figure	Part Numbers
Undercarpet Communications Cable, UTP, 4-Pair	5e	250 ft [76.2 m]	A	1499119-1
	6	250 ft [76.2 m]	B	1499539-1

Communications Cable Notching Tool



- For notching undercarpet communications cable to allow smooth turns in cable runs

20

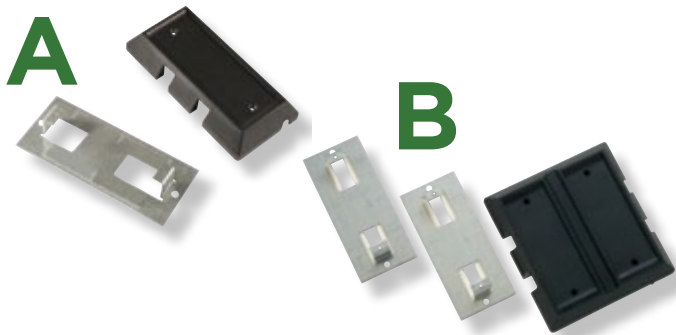
Description

Notching Tool for Undercarpet Communications Cable

Part Numbers

1725698-1

Low Profile Communications Floor Fittings

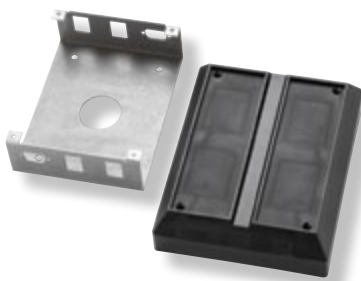


- Modular jack kits are available separately, see page 20
- Matches the design of the DCR kits
- Accepts 110Connect or SL Series modular jacks or SL Series Multimedia Jacks & Inserts
- 2-port accepts up to two modular jacks
- 4-port accepts up to four modular jacks

Description

Description			Figure	Part Numbers
Low Profile Communications Floor Fittings	2-Port	Black	A	554206-1
		Gray		554206-3
	4-Port	Black	B	555287-1
		Gray		555287-3

Low Profile Multimedia Floor Fitting



- Replicates the design of the DCR kits
- Mounts to floor with double sided tape (supplied), screws or studs (customer supplied)
- Cable entry from sides or bottom
- Can also accommodate up to four ACO (AMP Communications Outlet) single port installation kits (purchased separately)
- Accepts up to four 110Connect modular jacks, SL Series modular jacks, or SL Series multimedia jacks or inserts
- Accepts up to two SVGA (or similar sized connector) connectors (ordered separately)

Description

Low Profile Multimedia Floor Fitting Kit

Part Numbers

1479542-1

Modular Jack Kits and Accessories

20

A



B



- Modular jack kits include black colored jack
- Bracket mounts to floor fitting with double sided tape (supplied)
- Bracket accepts 110Connect and SL Series modular and multimedia jacks and inserts
- Modular jacks meet or exceed TIA and ISO component performance requirements
- Modular jacks feature universal wiring labels to permit wiring to either T568A or T568B patterns
- For more SL Series modular jacks see chapters 01, 02, 03 and 04
- For SL Series termination Tooling see Chapter 22

Description	Jack Color	Figure	EIA/TIA Category	Part Numbers
Modular Jack Bracket	—	A	—	1499543-1
SL Series Modular Jack Bracket Kits	Black	B	Cat 5e Cat 6	558054-1 1933377-1

Conference Room Kits

A



B



- Provides services for power and communications (4 ports of communications and 2 duplex power receptacles)
- Kits do not include carpet tiles
- Reduces cost of installation, no core drilling required
- Yields a more aesthetically pleasing and cleaner installation than power poles
- More flexible than any other method of service distribution
- No tripping over extension cords, unsightly "speed bumps" or duct taped cables
- Provides one circuit of power to two duplex receptacles in a compact, durable floor mounted outlet
- Provides four ports of any combination of voice or data on Category 5e or Category 6 cable to RJ45 modular jacks in a compact, durable floor mounted outlet
- Transition boxes can be easily retrofitted in place of existing power and communications wall outlets

Description	TIA/EIA Category	Figure	Part Numbers
Undercarpet Conference Room Kit	Category 5e	A	1479050-1
	Category 6	B	1933466-1
Kit Contents	Component	1479050-1	1933466-1
Category 5e Undercarpet Communications Cable	1499119-1	100 ft	-
Category 6 Undercarpet Communications Cable	1499539-1	-	100 ft
Flush Wall Frame Communications Transition Box	553739-2	1	1
Flush Wall Frame Communications Transition Box Cover	553095-1	1	1
Communications Transition Block, 110Connect, Category 5e	1479384-1	1	-
Communications Transition Block, 610XC, Category 6	1479985-1	-	1
Modular Jack Kit, Category 5e	558054-1	4	-
Modular Jack Kit, Category 6	1933377-1	-	4
Flush Wall Power Transition Box	554805-1	1	1
Flush Wall Power Transition Box Cover	1-553292-3	1	1
3-Conductor, 12 AWG, Standard Ground, Undercarpet Power Cable	3-553076-3	50 ft	50 ft
Top Shield	553536-3	50 ft	50 ft
Floor Preparation	554123-3	50 ft	50 ft
Spray Adhesive	6-553453-1	1 can	1 can
4-Port Low Profile Communications Floor Fitting	555287-1	1	1
Dual Duplex Receptacle DCR Kit	554192-1	1	1
Transition Block for Power	554862-1	1	1
Hold Down Tape	553481-1	1 Roll	1 Roll



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Chapter Summary

The AMP NETCONNECT AMPINERGY modular power distribution system can be used to deliver power to workstations in raised floor installations through AMP NETCONNECT AFWMs (Access Floor Work Station Modules), modular office systems furniture panels, retail store display fixtures, gaming fixtures and other methods as allowed by the NEC, CEC and local electrical codes.

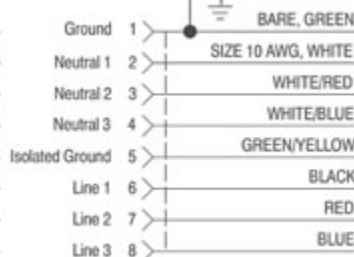
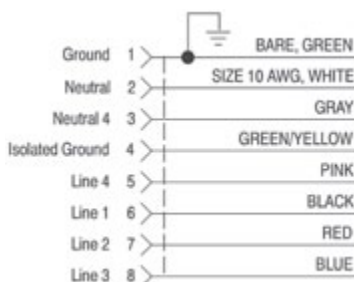
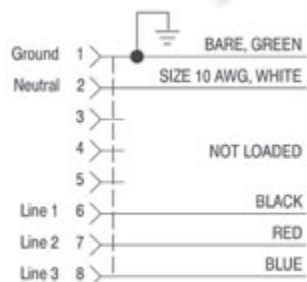
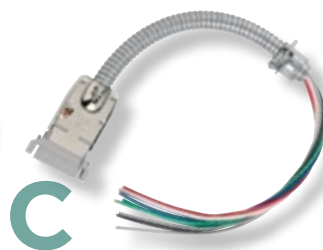
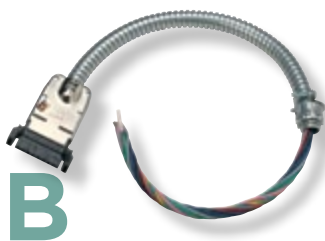
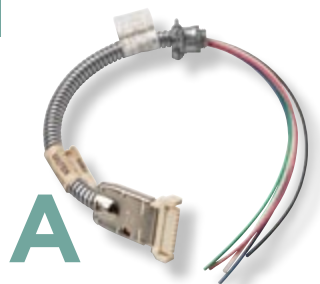
The modular wiring system is available in 5-wire/3-circuit, 8-wire/4-circuit shared neutral, and 8-wire/3-circuit dedicated neutral versions. The 5 and 8-wire versions have a 5.29 mm² [10 AWG] conductor (neutral) to accommodate higher currents due to third-order harmonics present with some installations. The 8-wire shared neutral configuration has a separate 3.32 mm² [12 AWG] neutral and isolated ground for the fourth circuit to allow an isolated, dedicated circuit for equipment sensitive to power line noise.

Section Facts

- AMPINERGY System is rated 20 Amps per circuit, 125/250 VAC
- UL Listed
 - UL 183, File: E132626
- UL Recognized Component
 - UL 498, File: E146448
 - UL 1286, File: E101904
- CSA Certified, File: 7189
 - CSA 22.2 number 203
 - CSA 22.2 number 203.1
 - CSA 22.2 number 42
- Complies with
 - NEC 2008 § 604
 - NEC 2008 § 605
 - NEC 2008 § 300.22(c)
 - CEC 2009 § 12-2500
 - CEC 2009 § 12-010
- System and components are available in a modular, shared neutral 5-wire/3 circuit, 8 wire/4 circuit, and dedicated neutral, 8-wire/3 circuit design
- Isolated ground circuit available in 8 wire configurations
- All components are plug and play system compatible
- All components are polarized and keyed to facilitate proper connection of components
- Multi-circuit power strips available in 3 or 4 circuit configuration
- Zone Distribution Modules available in up to 12 circuit configuration
- Layout and planning manual available for your CAD designer
- Contact AMP NETCONNECT Business Unit for construction specifications written in Construction Specifications Institute (CSI) or Construction Specifications Canada (CSC)

AMPINNERGY Line Entry Cable Assemblies

21

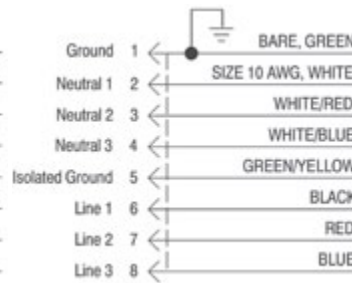
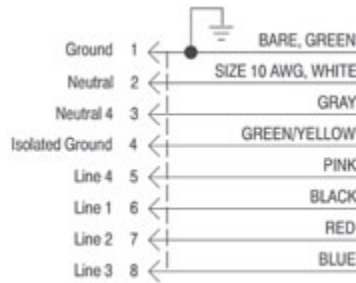
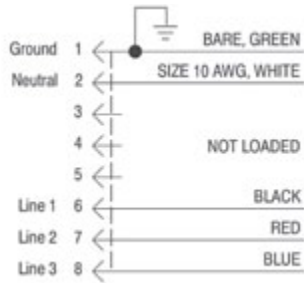
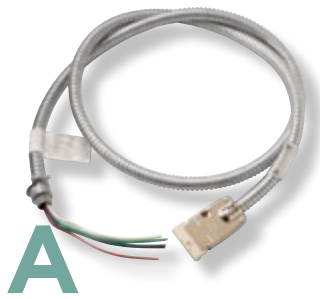


- Used to interface between manufactured wiring and other wiring systems such as building wiring, fixture wiring, or access floor workstation module wiring
- Female connector
- Mates to power connector cable assemblies
- Available in three circuit configurations:
 - 5-wire/3 circuit (3-1-1), shared neutral, white housing
 - 8-wire/4 circuit (4-2-2), shared neutral, black housing
 - 8-wire/3 circuit (3-3-2), dedicated neutral, gray housing

Wiring System	Length of Exposed Conductors	Neutral Size	Figure	Length ft	Length [m]	Part Numbers
5-Wire/3 Circuit (3-1-1), Shared Neutral	12 in [30.48 cm]	10 AWG	A	1.33	[0.40]	557652-1
				8	[2.44]	557652-3
				1	[0.30]	556148-1
				2	[0.61]	556148-2
				3	[0.91]	556148-3
8-Wire/4 Circuit (4-2-2), Shared Neutral	12 in [30.48 cm]	10/12 AWG	B	4	[1.22]	556148-4
				5	[1.52]	556148-5
				10	[3.05]	1-556148-0
				15	[4.57]	1-556148-5
				20	[6.10]	2-556148-0
				25	[7.62]	2-556148-5
				30	[9.14]	3-556148-0
				40	[12.19]	3-556148-2
				50	[15.24]	3-556148-1
				1	[0.30]	1933403-1
8-Wire/3 Circuit (3-3-2), Dedicated Neutral	12 in [30.48 cm]	10/12 AWG	C	2	[0.61]	1933403-2
				3	[0.91]	1933403-3
				4	[1.22]	1933403-4
				5	[1.52]	1933403-5
				10	[3.05]	1-1933403-0
				15	[4.57]	1-1933403-5
				20	[6.10]	2-1933403-0
				25	[7.62]	2-1933403-5
				30	[9.14]	3-1933403-0
				40	[12.19]	4-1933403-0
				50	[15.24]	5-1933403-0

AMPINNERGY Power Entry Cable Assemblies

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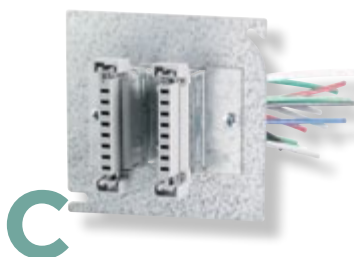
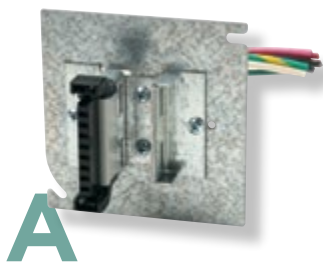


- Used to interface between manufactured wiring and other wiring systems, such as building wiring, fixture wiring, or access floor module wiring
- Male connector
- Mates to line connector cable assemblies, power junction boxes, power distribution modules (PDMs), zone distribution modules (ZDBs) and power transition units (PTUs)
- Available in three circuit configurations:
 - 5-wire/3 circuit (3-1-1), shared neutral, white housing
 - 8-wire/4 circuit (4-2-2), shared neutral, black housing
 - 8-wire/3 circuit (3-3-2), dedicated neutral, gray housing

Wiring System	Length of Exposed Conductors	Neutral Size	Figure	ft	Length [m]	Part Numbers
5-Wire/3 Circuit (3-1-1), Shared Neutral	12 in [30.48 cm]	10 AWG	A	2	[0.61]	555858-1
				3	[0.91]	555858-2
				4	[1.22]	555858-3
				5	[1.52]	2-555858-6
				10	[3.05]	555858-9
				15	[4.57]	1-555858-5
				20	[6.10]	1-555858-3
				25	[7.62]	1-555858-0
				30	[9.14]	2-555858-4
				40	[12.19]	2-555858-7
				50	[15.24]	1-555858-1
8-Wire/4 Circuit (4-2-2), Shared Neutral	12 in [30.48 cm]	10/12 AWG	B	2	[0.61]	555856-1
				3	[0.91]	555856-2
				4	[1.22]	555856-3
				5	[1.52]	555856-8
				10	[3.05]	1-555856-4
				15	[4.57]	1-555856-3
				20	[6.10]	1-555856-6
				25	[7.62]	555856-7
				30	[9.14]	1-555856-9
				40	[12.19]	2-555856-0
				50	[15.24]	1-555856-2
8-Wire/3 Circuit (3-3-2), Dedicated Neutral	12 in [30.48 cm]	10/12 AWG	C	2	[0.61]	1933402-2
				3	[0.91]	1933402-3
				4	[1.22]	1933402-4
				5	[1.52]	1933402-5
				10	[3.05]	1-1933402-0
				15	[4.57]	1-1933402-5
				20	[6.10]	2-1933402-0
				25	[7.62]	2-1933402-5
				30	[9.14]	3-1933402-0
				40	[12.19]	4-1933402-0
				50	[15.24]	5-1933402-0

AMPINNERGY Power Transition Units

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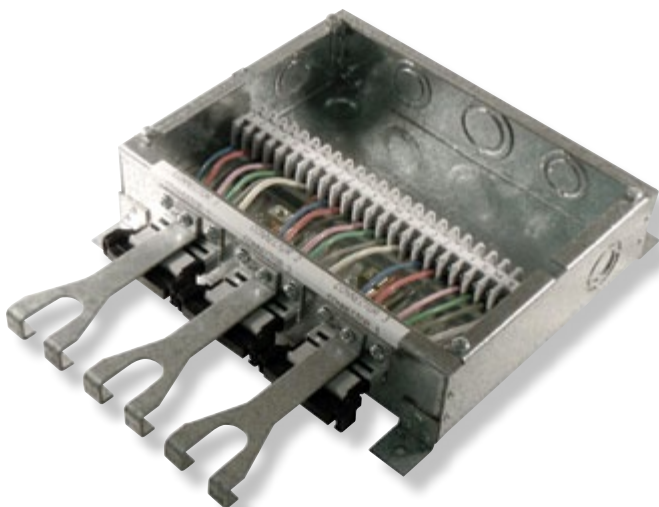


- Provides interface for building power to manufactured wiring system
- Female connector
- Four inch faceplate equipped with one or two hard wired line connectors to fit standard, customer supplied, four inch junction box
- Mates with power cable assemblies
- Available in three circuit configurations:
 - 5-wire/3 circuit (3-1-1), shared neutral, white housing
 - 8-wire/4 circuit (4-2-2), shared neutral, black housing
 - 8-wire/3 circuit (3-3-2), dedicated neutral, gray housing

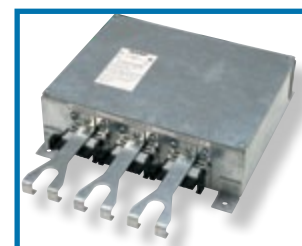
Wiring System

	Line Connectors	Figure	Part Numbers
5-Wire/3 Circuit (3-1-1), Shared Neutral	1		556190-1
	2		556190-2
8-Wire/4 Circuit (4-2-2), Shared Neutral	1	A	556191-1
	2		556191-2
8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1	B	1933399-1
	2	C	1933399-2

AMPINNERGY Zone Power Distribution Kit



- Equipped with 3 bulkhead mounted AMPINNERGY line connectors with an enclosure mounted strain relief attached for each AMPINNERGY cable assembly
- Female connector
- 24-position terminal strip allows easy transition between building wiring and manufactured wiring
- Terminal strip accepts up to 8 AWG wire for incoming building wiring
- Multiple knockout sizes (½ in, ¾ in, 1 in, 1 ¼ in) accommodate a variety of field installation requirements
- Factory assembled and tested
- External mounting legs secure kit to floor

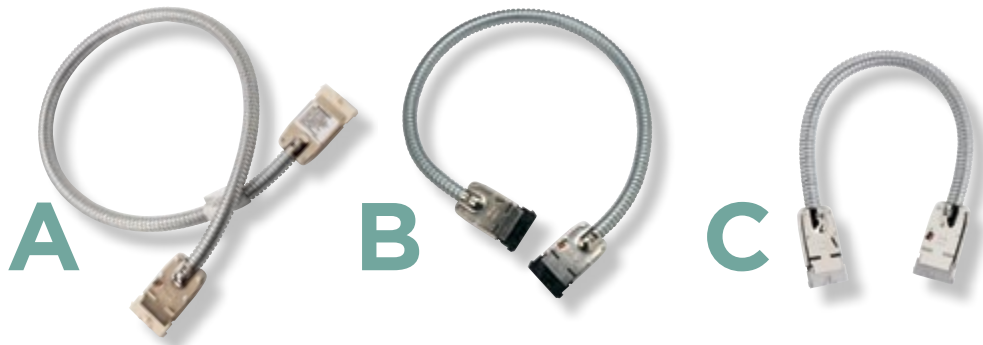


Wiring System

	Number of Circuits	Part Numbers
Shared Neutral (5-Wire/3 Circuit (3-1-1) and 8-Wire/4 Circuit (4-2-2))	Up to 12	1933419-8
Dedicated Neutral (8-Wire/3 Circuit (3-3-2))	Up to 9	1933419-3

AMPINNERGY Power-to-Power Cable Assemblies

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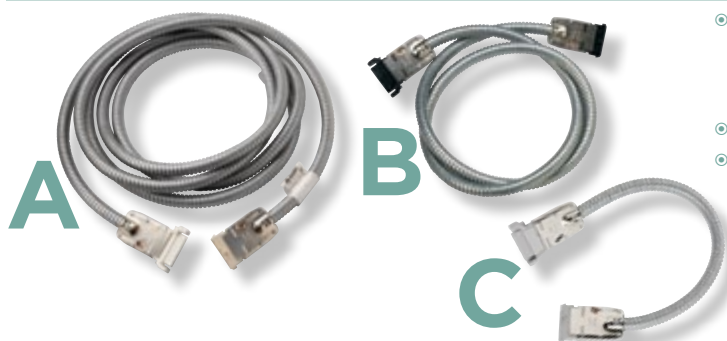


- Used to jumper system components together
- Male connectors both ends
- Mates with line connector cable assemblies, power junction boxes, power distribution modules, zone distribution modules, and power transition units
- Available in three circuit configurations:
 - 5-wire/3 circuit (3-1-1), shared neutral, white housing
 - 8-wire/4 circuit (4-2-2), shared neutral, black housing
 - 8-wire/3 circuit (3-3-2), dedicated neutral, gray housing

Wiring System	Neutral Size	Figure	ft	Length [m]	Part Numbers
5-Wire/3 Circuit (3-1-1), Shared Neutral	10 AWG	A	2	[0.61]	2-556212-0
			3	[0.91]	3-556212-3
			4	[1.22]	1-556212-5
			5	[1.52]	3-556212-6
			10	[3.05]	3-556212-1
			15	[4.57]	2-556212-3
			20	[6.10]	7-556212-1
			25	[7.62]	4-556212-5
			30	[9.14]	7-556212-2
			40	[12.19]	7-556212-3
			50	[15.24]	4-556212-8
8-Wire/4 Circuit (4-2-2), Shared Neutral	10/12 AWG	B	2	[0.61]	2-556127-4
			3	[0.91]	1-556127-8
			4	[1.22]	1-556127-5
			5	[1.52]	2-556127-7
			10	[3.05]	5-556127-6
			15	[4.57]	3-556127-3
			20	[6.10]	7-556127-9
			25	[7.62]	7-556127-1
			30	[9.14]	8-556127-7
			40	[12.19]	8-556127-8
			50	[15.24]	5-556127-5
8-Wire/3 Circuit (3-3-2), Dedicated Neutral	10/12 AWG	C	2	[0.61]	1933400-2
			3	[0.91]	1933400-3
			4	[1.22]	1933400-4
			5	[1.52]	1933400-5
			10	[3.05]	1-1933400-0
			15	[4.57]	1-1933400-5
			20	[6.10]	2-1933400-0
			25	[7.62]	2-1933400-5
			30	[9.14]	3-1933400-0
			40	[12.19]	4-1933400-0
			50	[15.24]	5-1933400-0

AMPINNERGY Power-to-Line Cable Assemblies

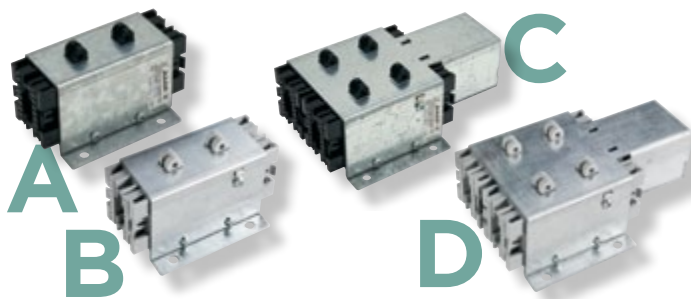
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- Used to jumper system components together and can be used to extend power-to-power cable assemblies
- Male to female connectors
- Mates with power connector and line connector cable assemblies, power junction boxes, power distribution modules, zone distribution modules, and power transition units
- Available in three circuit configurations:
 - 5-wire/3 circuit (3-1-1), shared neutral, white housing
 - 8-wire/4 circuit (4-2-2), shared neutral, black housing
 - 8-wire/3 circuit (3-3-2), dedicated neutral, gray housing

Wiring System	Neutral Size	Figure	Length ft	Length [m]	Part Numbers
5-Wire/3 Circuit (3-1-1), Shared Neutral	10 AWG	A	4	[1.22]	1-556730-0
			15	[4.57]	556730-3
			50	[15.24]	1-556730-3
8-Wire/4 Circuit (4-2-2), Shared Neutral	10/12 AWG	B	2	[0.61]	556731-6
			3	[0.91]	556731-8
			4	[1.22]	1-556731-0
			5	[1.52]	1-556731-1
			10	[3.05]	2-556731-5
			15	[4.57]	556731-3
			20	[6.10]	2-556731-6
			25	[7.62]	2-556731-4
			30	[9.14]	2-556731-8
			40	[12.19]	2-556731-9
8-Wire/3 Circuit (3-3-2), Dedicated Neutral	10/12 AWG	C	50	[15.24]	1-556731-3
			2	[0.61]	1933401-2
			3	[0.91]	1933401-3
			4	[1.22]	1933401-4
			5	[1.52]	1933401-5
			10	[3.05]	1-1933401-0
			15	[4.57]	1-1933401-5
			20	[6.10]	2-1933401-0
			25	[7.62]	2-1933401-5
			30	[9.14]	3-1933401-0
			40	[12.19]	4-1933401-0
			50	[15.24]	5-1933401-0

AMPINNERGY Power Distribution Modules (PDMs)



- Mates with power connector cable assemblies
- Female connectors
- Rated at 125/250 VAC, 20 A
- All PDM Units are bidirectional
- 4-port PDMs allow for circuits to be distributed in 3 directions
- 6-port PDMs allow for circuits to be distributed in 5 directions
- Lower profile PDM available upon request
- Available in three circuit configurations:
 - 5-wire/3 circuit (3-1-1), shared neutral, white housing
 - 8-wire/4 circuit (4-2-2), shared neutral, black housing
 - 8-wire/3 circuit (3-3-2), dedicated neutral, gray housing

Description	Length in	Power Ports	Figure	Part Numbers
Power Distribution Module (PDM), Standard Height, with Lug Mounts	2.78 [7.07]	4	5-Wire/3 Circuit (3-1-1), Shared Neutral	556173-2
			A 8-Wire/4 Circuit (4-2-2), Shared Neutral	556173-1
			B 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933405-1
		6	5-Wire/3 Circuit (3-1-1), Shared Neutral	556794-2
			C 8-Wire/4 Circuit (4-2-2), Shared Neutral	556794-1
			D 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933472-1

AMPINNERGY Modular Duplex Receptacles

Blank Modular Receptacle

Panel Thickness in [cm]	Figure	Color	Part Number
2.0 [50.8]	A	Black	1933011-1

5-Wire (3-1-1), Shared Neutral Modular Receptacles

Line	Amperage	Panel Thickness in [cm]	Color	Figure	Part Numbers
1	20	2.0 [50.8]	Black	B	406248-1
		2.5 [63.5]	Black		406265-1
2	20	2.0 [50.8]	Black		406249-1
		2.5 [63.5]	Black		406266-1
3	20	2.0 [50.8]	Black		406250-1
		2.5 [63.5]	Black		406267-1

8-Wire (4-2-2), Shared Neutral Modular Receptacles

Line	Amperage	Panel Thickness in [cm]	Color	Figure	Part Numbers
1	20	2.0 [50.8]	Black	B	406248-1
		2.5 [63.5]	Black		406265-1
2	20	2.0 [50.8]	Black		406249-1
		2.5 [63.5]	Black		406266-1
3	20	2.0 [50.8]	Black		406250-1
		2.5 [63.5]	Black		406267-1
4	20	2.0 [50.8]	Black		406251-1
		2.5 [63.5]	Black		406268-1

8-Wire (4-2-2), Shared Neutral, Isolated Ground Modular Receptacles

Line	Amperage	Panel Thickness in [cm]	Color	Figure	Part Numbers
1G	20	2.0 [50.8]	Orange		406252-2
		2.5 [63.5]	Orange		406269-2
2G	20	2.0 [50.8]	Orange		406253-2
		2.5 [63.5]	Orange		406270-2
3G	20	2.0 [50.8]	Orange		406254-2
		2.5 [63.5]	Orange		406271-2
4G	20	2.0 [50.8]	Orange		406255-2
		2.5 [63.5]	Orange		406272-2
5G	20	2.5 [63.5]	Orange		406273-2

8-Wire (3-3-2), Dedicated Neutral Modular Receptacles

Line	Amperage	Panel Thickness in [cm]	Color	Figure	Part Numbers
1	20	2.0 [50.8]	Black	C	1933393-1
2	20	2.0 [50.8]	Black	D	1933394-1
3	20	2.0 [50.8]	Black	E	1933395-1

8-Wire (3-3-2), Dedicated Neutral, Isolated Ground Modular Receptacles

Line	Amperage	Panel Thickness in [cm]	Color	Figure	Part Numbers
1G	20	2.0 [50.8]	Orange		1933396-2
2G	20	2.0 [50.8]	Orange	F	1933397-2
3G	20	2.0 [50.8]	Orange		1933398-2

A



B



C



D



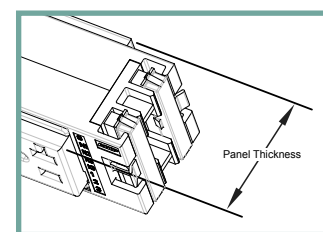
E

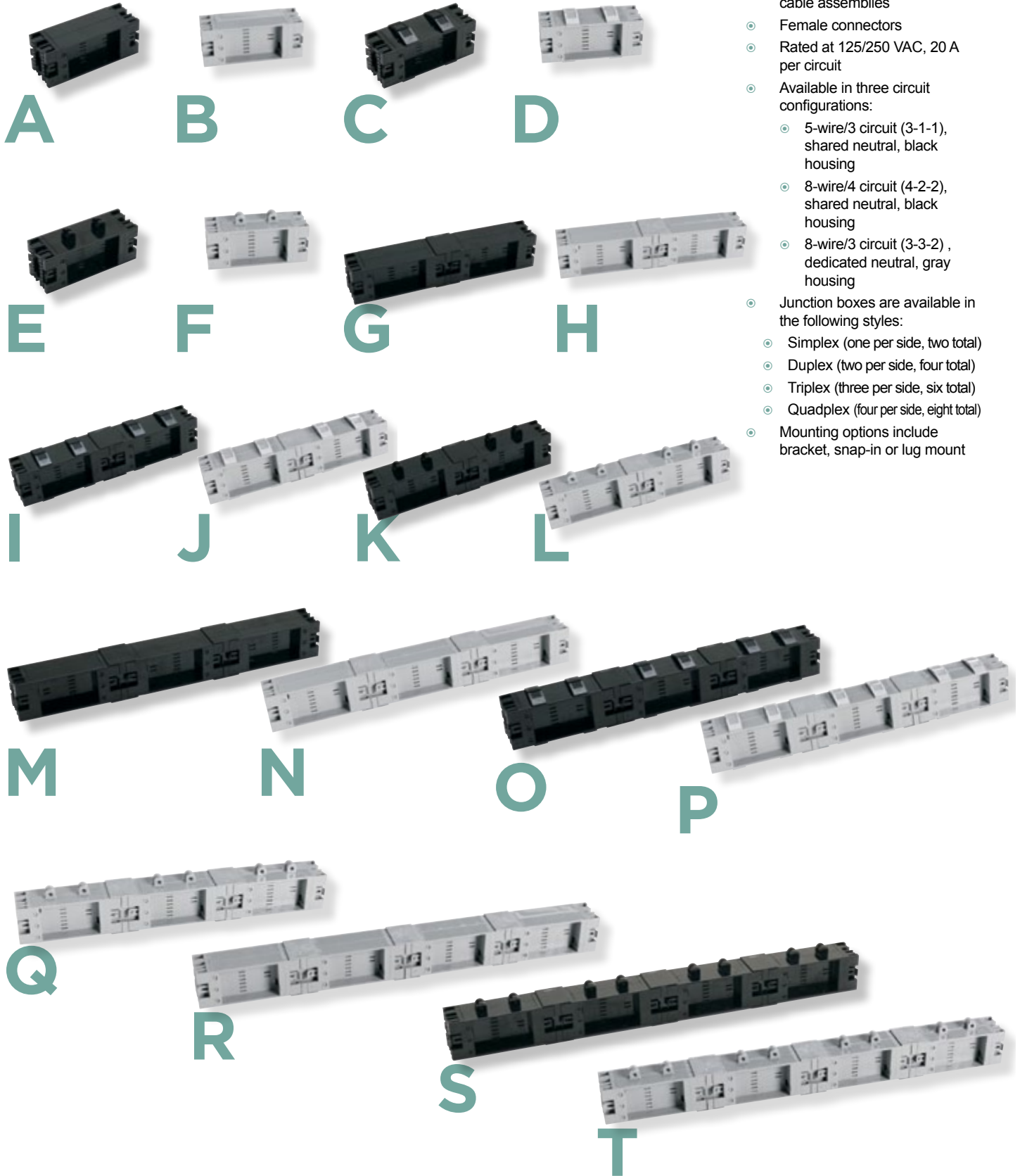


F



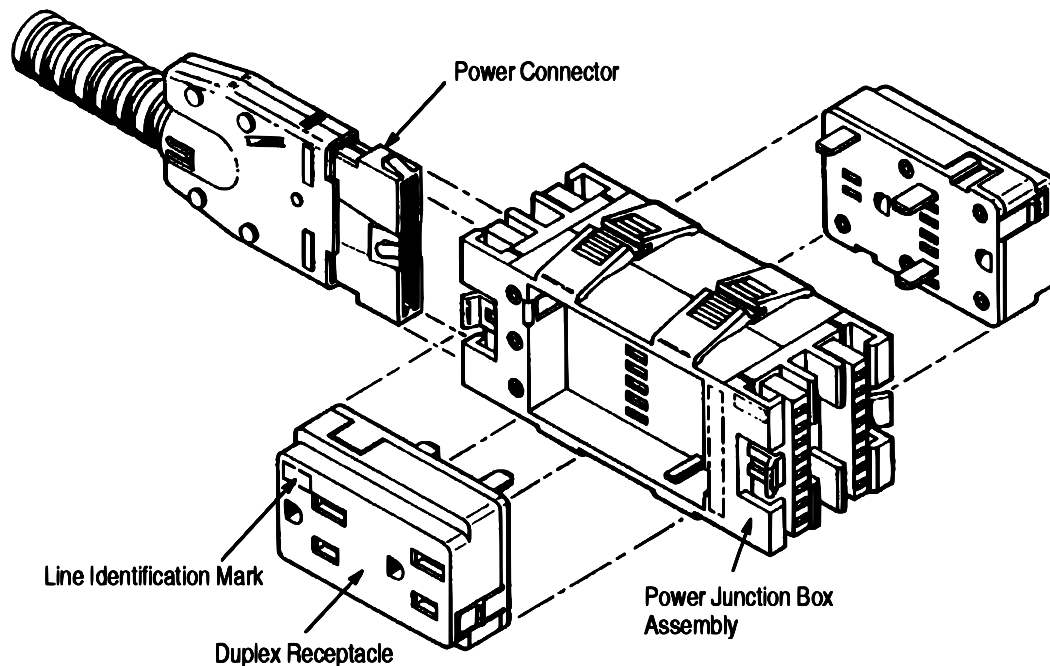
- Mates with power junction boxes and modular power strips
- Rated at 125 VAC, 20 A
- Available in three circuit configurations:
 - 5-wire/3 circuit (3-1-1), shared neutral, black housing
 - 8-wire/4 circuit (4-2-2), shared neutral, black housing
 - 8-wire/3 circuit (3-3-2), dedicated neutral, gray housing
- Meets NEMA 5-20R
- Available with standard or isolated ground
- Active line clearly indicated
- For 8-wire systems with isolated ground, isolated ground is marked with a triangle
- 3-3-2 and 8-wire 20 A isolated ground receptacles are orange, other receptacles are black
- Fully polarized and keyed
- Fits panel thicknesses of 2 in [50.8 mm] or 2.5 in [63.5 mm]
- Designed to accommodate field "plug-and-play" changes for phase and load balancing
- NOTE: 2 inch versions are most common and readily available





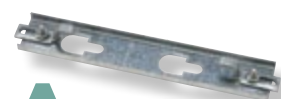
- Mates with power connector cable assemblies
- Female connectors
- Rated at 125/250 VAC, 20 A per circuit
- Available in three circuit configurations:
 - 5-wire/3 circuit (3-1-1), shared neutral, black housing
 - 8-wire/4 circuit (4-2-2), shared neutral, black housing
 - 8-wire/3 circuit (3-3-2), dedicated neutral, gray housing
- Junction boxes are available in the following styles:
 - Simplex (one per side, two total)
 - Duplex (two per side, four total)
 - Triplex (three per side, six total)
 - Quadplex (four per side, eight total)
- Mounting options include bracket, snap-in or lug mount

Description	Total Receptacles Accepted	Mounting Option	Figure	Part Numbers
Simplex Junction Boxes	2	Bracket	5-Wire/3 Circuit (3-1-1), Shared Neutral	556887-1
			A 8-Wire/4 Circuit (4-2-2), Shared Neutral	556888-1
			B 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933381-1
		Snap-in	5-Wire/3 Circuit (3-1-1), Shared Neutral	556209-1
			C 8-Wire/4 Circuit (4-2-2), Shared Neutral	556124-1
			D 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933382-1
		Lug	5-Wire/3 Circuit (3-1-1), Shared Neutral	556217-1
			E 8-Wire/4 Circuit (4-2-2), Shared Neutral	556132-1
			F 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933383-1
Duplex Junction Boxes	4	Bracket	5-Wire/3 Circuit (3-1-1), Shared Neutral	556886-1
			G 8-Wire/4 Circuit (4-2-2), Shared Neutral	556946-1
			H 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933384-1
		Snap-in	5-Wire/3 Circuit (3-1-1), Shared Neutral	555844-1
			I 8-Wire/4 Circuit (4-2-2), Shared Neutral	555843-1
			J 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933385-1
		Lug	5-Wire/3 Circuit (3-1-1), Shared Neutral	555848-1
			K 8-Wire/4 Circuit (4-2-2), Shared Neutral	555847-1
			L 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933386-1
Triplex Junction Boxes	6	Bracket	M 8-Wire/4 Circuit (4-2-2), Shared Neutral	557802-2
			N 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933387-1
		Snap-in	O 8-Wire/4 Circuit (4-2-2), Shared Neutral	557802-1
			P 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933388-1
		Lug	8-Wire/4 Circuit (4-2-2), Shared Neutral	1479653-1
			Q 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933389-1
Quadplex Junction Boxes	8	Bracket	8-Wire/4 Circuit (4-2-2), Shared Neutral	557950-1
			R 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933390-1
		Snap-in	8-Wire/4 Circuit (4-2-2), Shared Neutral	1479120-1
			8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933391-1
		Lug	S 8-Wire/4 Circuit (4-2-2), Shared Neutral	1479442-1
			T 8-Wire/3 Circuit (3-3-2), Dedicated Neutral	1933392-1



AMPINNERGY Mounting Brackets

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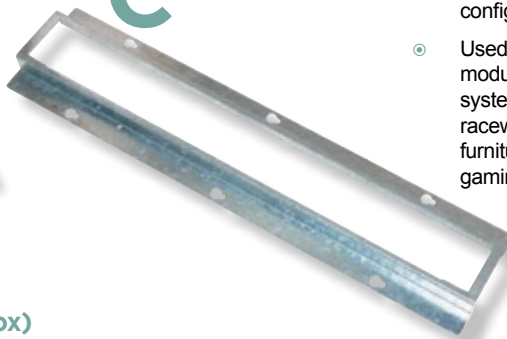


A

B



C



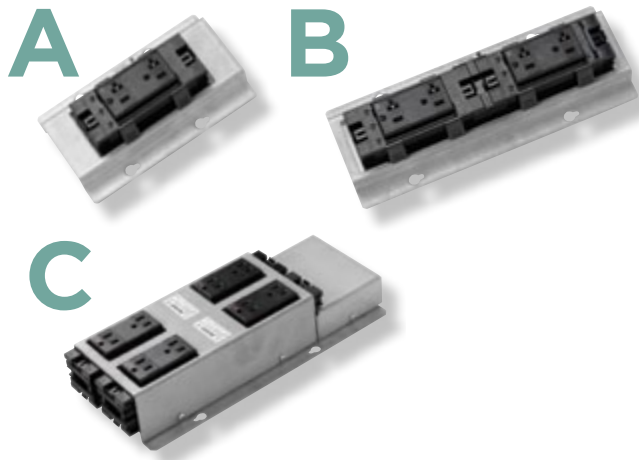
Example of 1933781-1 loaded with 1933382-1 (Snap-in Mount, Junction Box)

- Contact your local AMP NETCONNECT product sales engineer for the availability of other bracket configurations
- Used to retrofit AMPINNERGY modular power distribution system junction boxes into raceways of existing modular furniture panels, retail and gaming fixtures

Description	Works With	Type	Figure	Part Numbers
Bracket	Bracket Mount Junction Boxes	Standard	A	556920-1
		Multiplex		556944-1
Vertical Keyhole Mount Bracket	Snap-in Mount, Junction Boxes	Single	B	1933781-1
		Duplex		1933781-2
Horizontal Keyhole Mount Bracket	Snap-in Mount, Junction Boxes	Single	C	1479217-1
		Duplex		1479219-1
		Triplex		1933939-1
		Quadplex		1933940-1

AMPINNERGY Keyhole Mount, Modular Receptacle, Power Strips

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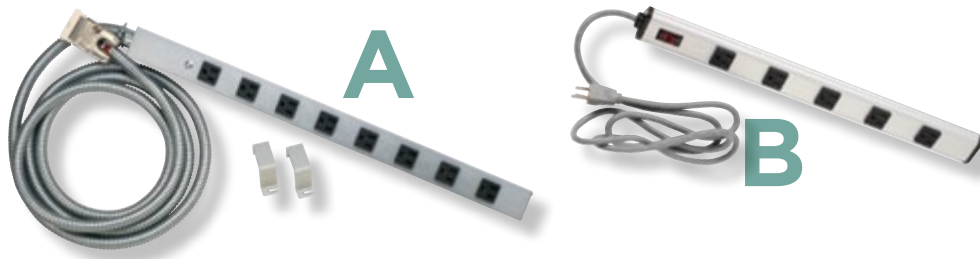


Example of T-slot Wall Installation

- Used for T-slot or surface mount wall and counter applications
- Female connectors
- Accept modular, duplex receptacles as listed
- Mates with power cable assemblies
- Polarized and keyed
- Rated at 125/250 VAC, 20 A per circuit

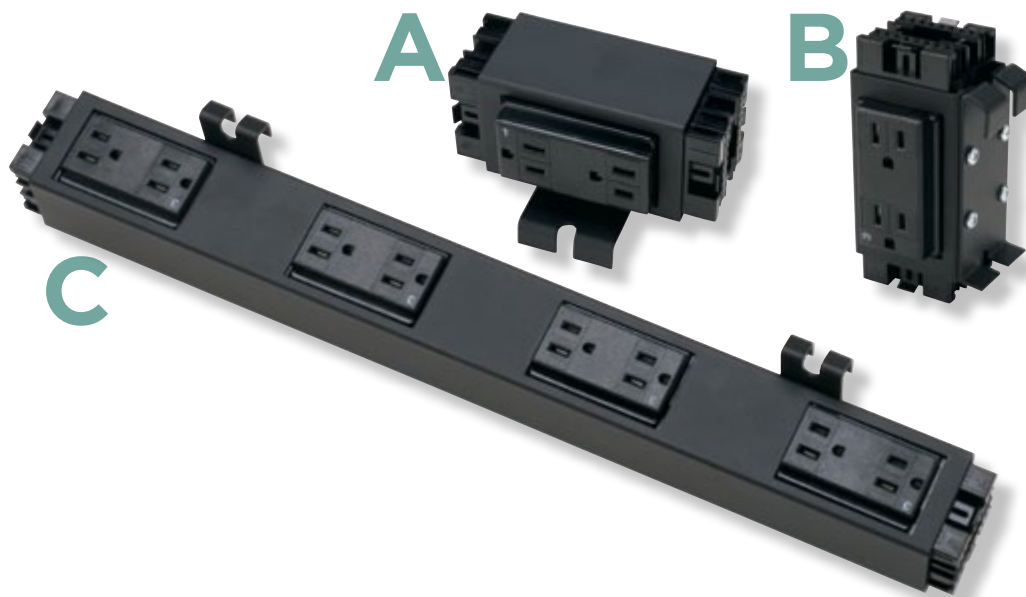
Description	Included Modular Duplex Receptacles	Amperage	Wiring System	Figure	Line 1	Line 2	Line 3	Line 4
Simplex Power Strip	1	20 A	8-Wire/4 Circuit (4-2-2) 8-Wire/3 Circuit (3-3-2)	A	1479218-1 1933413-1	1479218-2 1933413-2	1479218-3 1933413-3	1479218-4 —
Duplex Power Strip	2	20 A	8-Wire/4 Circuit (4-2-2) 8-Wire/3 Circuit (3-3-2)	B	1479220-1 1933414-1	1479220-2 1933414-2	1479220-3 1933414-3	1479220-4 —
Quadplex Power Strip	4	20 A	8-Wire/4 Circuit (4-2-2) 8-Wire/3 Circuit (3-3-2)	C	1479216-1 1933415-1	1479216-2 1933415-2	1479216-3 1933415-3	1479216-4 —

AMPINNERGY Single Receptacle, Power Strips



- 557958 features AMPINNERGY power connector which allows connection to AMPINNERGY junction box of PDM
- 1479544 features a standard, three prong (NEMA-5-15) plug
- Rated at 125/250 VAC, 15 A

Description	Included Receptacles	Line	Figure	Part Numbers
Power Strip, with 10 ft Power (Male) Connector Cable	8 Fixed, Single	1	A	557958-1
Power Strip, with 6 ft Cable and 3 (NEMA-5-15) Prong	5 Fixed, Single		B	1479544-1



- Used for T-slot or surface mount wall and counter applications
- Female connectors
- Allows connection to AMPINNERGY junction box or PDM when using power-to-power cable assemblies
- Modular Receptacles can be field changed for phase balancing - additional line receptacles are ordered separately
- Designed to allow availability of up to four circuits at each receptacle port opening when using the AMPINNERGY 8-wire four circuit system
- Accepts modular, duplex receptacles as listed
- Mates with power cable assemblies
- Polarized and keyed
- Rated at 125/250 VAC, 20 A per circuit

Description	Included Receptacles	Orientation	Amperage	Figure	Line	Part Numbers
Simplex Power Strip, Double Sided	2 Modular Duplex Receptacle	Horizontal Rack	15 A	A	1	3-1479093-1
					2	3-1479093-2
					3	3-1479093-3
					4	3-1479093-4
		Vertical Slot	15 A		1	8-1479093-1
					2	8-1479093-2
					3	8-1479093-3
					4	8-1479093-4
		Vertical Rack	15 A	B	1	3-1479077-1
					2	3-1479077-2
					3	3-1479077-3
					4	3-1479077-4
Quadplex Power Strip, Keyhole Mount	4 Modular Duplex Receptacles	Horizontal Rack	15 A	C	1	3-1375280-1
					2	3-1375280-2
					3	3-1375280-3
					4	3-1375280-4
		Vertical Slot	15 A		1	8-1375280-1
					2	8-1375280-2
					3	8-1375280-3
					4	8-1375280-4



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<http://www.ampnetconnect.com>





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Die Set/Tool to Modular Plug Cross-Reference

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Modular Plug	Modular Plug Tool Kits		Individual Modular Plug Die Sets for Hand Tool 2-231652-0				
	790163-1	790163-5	1-231666-4	1-853400-0	853400-1	853400-7	853400-8
1479583	—	—	X	X	—	—	—
1479584	—	—	X	X	—	—	—
1479585	—	—	X	X	—	—	—
1479586	—	—	X	X	—	—	—
1479682	X	—	—	—	—	—	—
1479683	X	—	—	—	—	—	—
1479185	—	X	—	—	—	—	—
1479184	—	X	—	—	—	—	—
1375202	X	—	—	—	—	—	—
1375204	X	—	—	—	—	—	—
554169	—	—	X	—	X	—	—
554170	—	—	X	—	X	—	—
554710	—	—	X	—	—	—	X
554720	—	—	X	—	X	—	—
554739	—	—	X	—	X	—	—
555042	—	—	X	—	—	—	X
555174	—	—	X	—	—	X	—
555175	—	—	X	—	—	X	—
555177	—	—	X	—	—	X	—
555417	—	—	X	—	X	—	—
555426	—	—	X	—	—	X	—
557315	—	—	X	—	X	—	—
558530	—	—	X	X	—	—	—
569278	—	—	X	X	—	—	—
569550	—	—	X	X	—	—	—
569552	—	—	X	X	—	—	—
569530	—	—	X	—	X	—	—
569532	—	—	X	—	X	—	—
569542	—	—	X	—	—	—	X
641337	—	—	X	—	—	—	X

Tool Kit Compatibility Chart

Tool Kit Name	Tool Kit	MT-RJ	MT-RJ SECURE	LightCrimp PLUS			LightCrimp	Epoxy/Polish		
	Part Number	Jacks	Jacks	**LC	SC	ST	Splice	LC	SC	ST
LightCrimp PLUS Termination Tool Kit	1553212-1	—	—	X	X	—	X	—	—	—
LightCrimp PLUS No-epoxy/No-polish Universal Tool Kit	1278118-4	X	X	X	X	X	—	—	—	—
LightCrimp PLUS No-epoxy/No-polish Universal Tool Kit	1278118-5	X	X	X	X	X	—	—	—	—
LightCrimp PLUS No-epoxy/No-polish LC and SC Tool Kit	1754845-1	—	—	X	X	—	—	—	—	—
LightCrimp PLUS No-epoxy/No-polish LC and SC Tool Kit	1754845-2	—	—	X	X	—	—	—	—	—
LightCrimp PLUS No-epoxy/No-polish ST Tool Kit	492697-1	—	—	—	—	X	—	—	—	—
LightCrimp PLUS No-epoxy/No-polish ST Tool Kit	492697-2	—	—	—	—	X	—	—	—	—
MT-RJ Jack Tool Kit	1278346-1	X	X	—	—	—	—	—	—	—
	1278346-2	X	X	—	—	—	—	—	—	—
Epoxy/Polish Tool Kits	503746-7	—	—	—	—	—	—	X*	X	—
	503746-1	—	—	—	—	—	—	X*	—	X

*Note: Termination of LC Epoxy/Polish Connectors requires additional tools listed in this chapter.

**Note: Termination includes LC SECURE Connectors

Epoxy/Polish Connector Consumables/Compatibility Chart

Epoxy/Polish Connector	Epoxies			Polishing Films					Consumables Package*
	EPO-TEK 504035-1	TRA-CON 1918652-1	HYSOL 502418-1	9 µm 1374484-1	5 µm 228433-8	Diamond Film 503887-1	0.3 µm 228433-5	Final Polishing Film 502748-2	
LC Single-mode	X	X	X	X	X	X	X	—	502306-4
LC Multimode	X	X	X	X	X	X	X	—	502306-4
SC Single-mode	X	X	X	—	X	—	X	X	502306-2
SC Multimode	X	X	X	—	X	—	X	X	502306-2
ST Single-mode	—	X	X	—	X	—	X	X	502306-2
ST Multimode	—	X	X	—	X	—	X	—	502306-1

*Note: Epoxy & film for ≈ 100 connectors.

Twisted Pair Termination Tooling

SL Series Modular Jack Termination Tool and Accessories



- Termination tool for SL Series jacks
- Simplifies the termination process, especially for Category 6 Jacks
- Terminates and cuts all 8 conductors at once
- Simplifies lacing process and speeds up terminations
- Tool without lacing fixture is for use with SL Series AMP-TWIST 6A Modular Jacks

SL Series Modular Jack Termination Tool UTP Termination Method



Step 1



Step 2



Step 3



Step 4



Step 5



Step 6

Description

SL Series Modular Jack Termination Tool

With Lacing Fixture

Part Number

1725150-1

Replacement Lacing Fixture

Without Lacing Fixture

1725150-3

1673956-1

Pro-Installer Twisted Pair Tool Kit



- Includes:
 - Installer's knife
 - Pro impact tool with extended-life blade
 - Shears
 - AMP NETCONNECT tool pouch
- For use with 110Connect and SL Series modular jacks and other 110-style terminations

Description

Pro-Installer Twisted Pair Tool Kit

Part Number

1375307-1

110 Punch Down Tools with Blades



- The industry standard termination tool for all 110Connect terminations
- Each tool comes with a blade
- For use with 110Connect and SL Series modular jacks and other 110-style terminations

Description

Pro Impact Tool with Extended-Life Blade

Figure

A

Part Number

1375308-1

Standard Impact Tool with Standard Blade

B

1583608-1

Non-Impact Tool with Standard Blade

C

1583236-1

110 Punch Down Tool Replacement Blades

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- Extended-life blades have a lifetime
- 3 times longer than standard blades

Description	Figure	Part Number
Extended-Life 110 Blade	A	1375309-1
Extended-Life 66/110 Blade	B	1375310-1

Palm Grip Tool



- Fits comfortably into one hand
- Holds one 110Connect jack, one SL Series 110Connect jack, or ACO 110 card edge connector for termination

Description	Part Number
Palm Grip Tool	569949-1

Cable Strippers and Cutters



- Cyclops stripper suitable for use with UTP Cable
- Coaxial stripper can be adjusted for use with RG-6, RG-58 and RG-59 cable

Description	Figure	Part Number
Cyclops Cable Stripper	A	1375317-1
Coaxial Cable Stripper	B	1490490-1
Diagonal Cutters	C	1116571-1

PRO-CRIMPER III Hand Tool and Die Sets for Twisted Pair Applications



PRO-CRIMPER III

- External strain relief clamp die set and tool are for use with the external strain relief clamp for 8-position Category 3, 5, and 5e modular plugs only

Description	Part Number
PRO-CRIMPER III Hand Tool	354940-1
External Strain Relief Clamp	Hand Tool and Die Set
	224928-1
	Die Set Only
	224928-2

Category 6 Modular Plug Hand Tool and Die Set

- Category 6 modular plug die set and tool crimps both the strain relief and the modular plug contacts at the same time
- Category 6 modular plugs in Chapter 02

Description	Cable O.D.	Part Number
Category 6 Modular Plug	5 – 6 mm	Hand Tool and Die Set
		790163-1
	6 – 7 mm	Die Set Only
		790163-2
		Hand Tool and Die Set
		790163-5
		Die Set Only
		790163-6

Pro-Installer's Modular Plug Hand Tool



- Ratchet control provides complete termination cycle
- Interchangeable die sets accommodate all plug sizes
- Die set to modular plug cross-reference on page 22-02
- Clamshell packaging is made of clear plastic and is for point-of-purchase display

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Description	Color Dot	Includes	Packaging	Part Number
4-Position Handset	Green	Hand Tool and Die Set	Standard	2-231652-3
		Die Set Only	Clamshell	853400-3
4 and 6-Position Line	Blue	Hand Tool and Die Set	Clamshell	2-231652-4
		Die Set Only	Standard	2-231652-8
6-Position Offset Latch	Orange	Hand Tool and Die Set	Clamshell	853400-8
		Die Set Only	Standard	2-231652-6
6-Position Long Body	Violet	Hand Tool and Die Set	Clamshell	853400-6
		Die Set Only	Standard	2-231652-7
8-Position Line	Black	Hand Tool and Die Set	Clamshell	853400-7
		Die Set Only	Standard	2-231652-1
8-Position High Performance	White	Hand Tool and Die Set	Clamshell	2-231652-2
		Die Set Only	Clamshell	853400-1
8-Position High Performance	White	Hand Tool and Die Set	Standard	3-231652-0
		Die Set Only	Clamshell	3-231652-1
			Clamshell	1-853400-0

Pro-Installer's Modular Plug Hand Tool Kits and Accessories

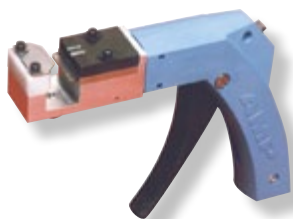


- Each kit contains carrying case, blade replacement kit, screw driver, and items as listed
- Modular plug to die set cross reference listed on page 22-02

Description	Included Components						Part Number
	Hand Tool 2-231652-0	High Performance, 8-Position Die Set 1-853400-0	8-Position Line Die Set 853400-1	6-Position, Long Body Die Set 853400-7	4- & 6-Position Line Die Set 853400-8	4-Position Handset Die Set 853400-3	
Pro-Installer's Mod Plug Hand Tool Kits	X	X	X	X	X	—	1-231666-4
	X	—	X	X	X	X	1-231666-3
	X	—	X	X	X	—	1-231666-2
	X	—	X	—	X	X	1-231666-1
	X	—	X	—	X	—	1-231666-0
Carrying Case, Blade Replacement Kit and Screw Driver ONLY							231666-9
Replacement Blade Kit (5 Cutters and 5 sets of Strip Blades)							231662-5
Cutter Blade							856727-1

Pistol Grip Tool for AMP-BARREL Edge Connectors

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- The pistol grip tool terminates AMP-BARREL edge connectors one pair at a time
- Shortens assembly time by trimming conductors to the proper length and helps maintain proper pair twist for high performance cables
- This tool requires the installation kit to be fitted with a special edge connector, part number 406351-1

Description

Pistol Grip Tool with Head
Head only

Part Number

58568-1
122533-1

AMP-BARREL Wire Insertion Tools



- Used to insert and terminate wires into the special edge connector (Chapter 05) for use with the pistol grip tool
- Wire insertion tools for undercarpet transition blocks may be used to insert and terminate wires into AMP-BARREL connectors used in undercarpet cabling system transition blocks
- Wire insertion tools for undercarpet transition blocks cuts off conductor when it is inserted

For Use With:

ACO Edge Connectors
Wire Insertion Tool for UC Transition Blocks

Figure

A
B

Part Number

556706-1
231890-1

Portable “Butterfly” Hand Tool (MI-1) for CHAMP 25-Pair Connectors



- Mass terminates and shears all wires in a single operation
- Wires can be laced in tool or in separate lacing fixture
- Base plate can be bench-mounted

Description

Standard 14-50 Positions, 90° Wire Dress
Optional Lacing Fixture

Part Number

229378-1
230328-3

Palm Grip Hand Tool Kits



- 14 to 64-position kit includes wire inserter, all 5 sizes of index slides, cable clamp, insertion/extraction tool (230238-1), and carrying case
- 50-position kit includes wire inserter, 50-position index slide and cable clamp

Description

14 to 64-Position
50-Position only

Part Number

229764-2
229451-2

Insertion/Extraction Tools



- Used with CHAMP Connectors
- Wire insertion tool is used to insert individual wires when making repairs
- Contact insertion/extraction tool is used to replace damaged contacts

Description	Figure	Part Number
Contact Insertion/Extraction Tool	A	230238-1
T-Handle Wire Insertion Tool	B	229384-1

Twisted Pair Testing Tools



- 4-Pair UTP Tester:
 - Tests for opens, shorts and wire map (mis-wires, reversals, and split pairs)
 - Auto-on/off feature
 - Battery low indicator
- Butt Set:
 - LCD display shows: on-hook voltage, number dialed, off-hook current, caller ID, stored numbers, etc.
 - Tone and pulse dialing
 - 6-Position modular cord set attachment included
 - Auto-off feature
- Tone Generator:
 - Three built-in tones
 - Auto-off feature
 - Separate talk battery for increased voltage and power for test sets
 - 6-Position modular jack allows multiple cord/test lead sets to be used for different applications
 - Comes with test lead set
- Tone Tracer:
 - Permits wire and cable identification without direct metallic contact
 - Ergonomic design
 - Can be used with any tone generator
 - Quick change tips available

Description	Figure	Part Number
4-Pair UTP Tester	A	1490530-1
Butt Set	B	1490532-1
Tone Generator	C	1490531-1
Tone Tracer	D	1490533-1

LightCrimp PLUS LC/SC and LightCrimp Splice Termination Tool Kit

22



- Includes all tools need for installing LightCrimp Plus LC, LC SECURE, SC, and LightCrimp Splice
- Convenient carrying case
- Tool Kit includes:
 - Splice/Cable buffer holder
 - PRO-CRIMPER III hand tool
 - LC/SC/Splice die set
 - Fiber cleaver
 - 2.0mm cable splitter
 - Buffer stripper
 - Cable jacket stripper
 - Strength member shears

Description	Figure	Part Number
Termination Tool Kit for LightCrimp PLUS LC, SC, and LightCrimp Splice	A	1553212-1
Replacement Tools (For Tools Included in This Kit):		
PRO-CRIMPER III Hand Tool (Hand Tool Only, Die Sets Purchased Separately)	B	2064431-1
LightCrimp Splice Die Set (Die Set Only PRO-CRIMPER III Hand Tool Purchased Separately)	C	1985766-1
LightCrimp Splice/Cable Buffer Holder	D	1985771-1
Hand Held Fiber Cleaver	E	1871696-1
LightCrimp Plus SC/LC Cable/Buffer Holder	F	2064540-1
LightCrimp 2.0 mm Jacketed Cable Splitter		2064453-2
LightCrimp Buffer Stripper		492109-2
LightCrimp Cable Jacket Stripper		501198-1
Strength Member Shears		501014-1

LightCrimp PLUS Termination Tool Kits



- Universal kits Include all tools needed for installing all LightCrimp Plus no-epoxy/no-polish connectors, MT-RJ, and MT-RJ SECURE jacks
- Convenient carrying case

Description	For Use With	Optional Components		Part Number
		Cleave Tool 1871696-1	Inspection Microscope 1754767-1	
Universal LightCrimp PLUS No-epoxy/No-polish Tool Kit	LC, MT-RJ, SC, ST	X	—	1278118-4
		X	X	1278118-5
		X	—	1754845-1
LightCrimp PLUS Connector Termination Tool Kit	LC, SC	X	X	1754845-2
		X	—	492697-1
	ST	X	X	492697-2

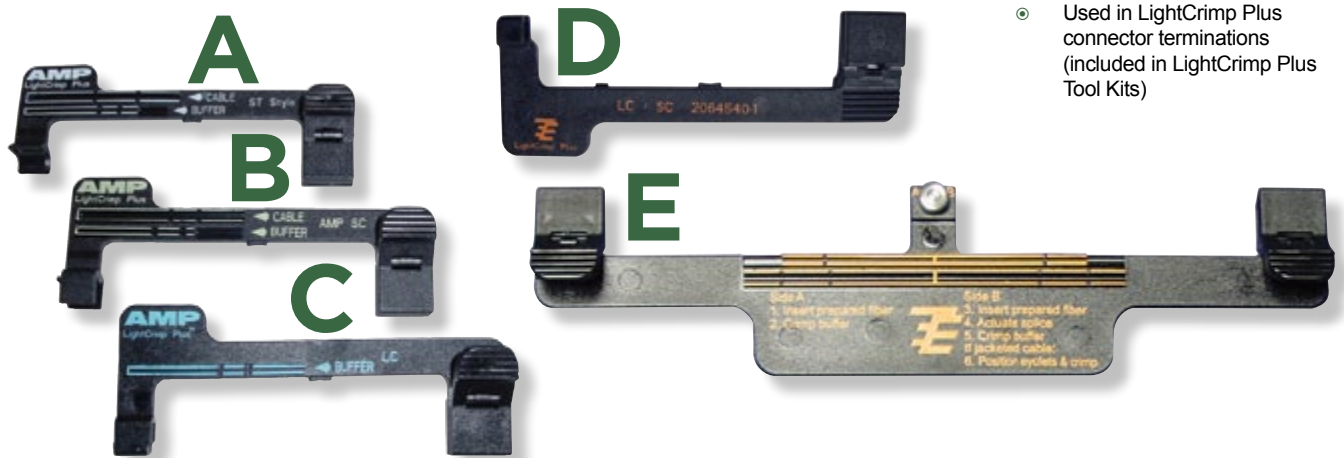
MT-RJ Jack Termination Tool Kit



- Includes all tools needed for installing MT-RJ and MT-RJ SECURE jacks

Description	Optional Components		Part Number
	Cleave Tool 1871696-1	Inspection Microscope 1754767-1	
MT-RJ Termination Tool Kit with cleave tool	X	—	1278346-1
	X	X	1278346-2

LightCrimp PLUS Cable Holders



- Used in LightCrimp Plus connector terminations (included in LightCrimp Plus Tool Kits)

22

Connector Type	Figure	Part Number
ST	A	492703-1
SC	B	1278023-1
LC	C	1754138-1
LC and SC	D	*2064540-1
LightCrimp Splice Holder	E	*1985771-1

* Used with die set 1985766-1

Hand Held Optical Fiber Cleaver



- Cleave fibers for LightCrimp Plus connectors, MT-RJ, and MT-RJ SECURE jacks
- Operator independent
- Blade life-span more than 10,000 cleaves
- Cleave surface angle $<1.5^\circ$
- No fracture, roll-off, or lip cleaves

Description	Part Number
Hand Held Optical Fiber Cleaver	1871696-1

Epoxy/Polish Connector Termination Tool Kits



- Includes all tools necessary to install the listed epoxy/polish connectors
- For LC terminations, also order LC Termination Accessories Kit
- Tool kits include:
 - Pro-Crimper III Hand Tool and crimping dies
 - Polishing bushings
 - Polishing film (also sold separately, this chapter)
 - Fiber strippers
 - Scribe tool
- Includes polishing films to install ≈ 60 epoxy/polish connectors
- Epoxy is sold separately (see page 22-10)
- Does not include curing oven or microscope
- Convenient carrying case

Description	For Use With	Part Number
LC Termination Accessories Kit (use with 503746)	LC	1754462-1
Epoxy/Polish Connector Termination Tool Kits	SC	503746-7
	ST	503746-1

EPO-TEK 353ND Epoxy



- For use with SC and LC Connectors
- Pre-measured two-part packets for consistent results
- Long pot life once mixed
- Heat-cured epoxy
- Supplied in 4-gram packets
- Cures in 15 minutes at 115° C
- Epoxy curing time starts after the oven has restabilized to the desired temperature after inserting the connectors into the curing block

Description

EPO-TEK 353ND Epoxy

Part Number

504035-1

TRA-CON Epoxy



- For use with SC, LC and ST Connectors
- Pre-measured two-part packets for consistent results
- Can be heat-cured or cured at ambient temperature
- Supplied in 2-gram packets
- Each packet terminates ≈ 250 connectors
- 25 packets per pack
- Pot life ≈ 30 minutes
- Cures in:
 - 24 hours @ 25°C
 - 2 hours @ 65°C
 - 10 minutes @ 110°C
- Epoxy curing time starts after the oven has restabilized to the desired temperature after inserting the connectors into the curing block

Description

TRA-CON Epoxy

Part Number

1918652-1

HYSOL Epoxy-Tubes



- For use with SC, LC and ST Connectors
- Two-part epoxy in two tubes
- Heat-cured epoxy
- Terminates ≈ 400 connectors
- One set of two (2) tubes per part number
- Pot life ≈ 30 minutes
- Cures in 30 minutes at 100°C
- Epoxy curing time starts after the oven has restabilized to the desired temperature after inserting the connectors into the curing block

Description

HYSOL Epoxy-Tubes

Part Number

502418-1

Epoxy Applicator Syringe



- 3 cc capacity

Description

Epoxy Applicator Syringe

Part Number

501473-3

Polishing Films and Consumables Kits

- Polishing films used to install LightCrimp and Epoxy/Polish Connectors
- See listing of correct films by connector type (see page 22-02)
- Consumable kits include all consumables needed to install ≈ 100 of the listed Epoxy/Polish connectors

Description	For Use With	Package Quantity	Grit Grade	Part Number
Hand Polishing Film	Epoxy/Polish Connectors	100	15 µm	228433-9
		15	9 µm	1374484-1
		100	5 µm	228433-8
		100	1 µm	228433-7
		5	Diamond	503887-1
Final Polishing Film	Epoxy/Polish Connectors	100	0.3 µm	228433-5
		5	Final	502748-2
Consumables Kit	Multimode ST	—	—	502306-1
	SC, Single-mode ST	—	—	502306-2
	LC	—	—	502306-4

Epoxy Curing Oven



- Reduces time required to cure epoxy
- Provides a uniform, controlled curing environment
- Used for all AMP NETCONNECT Optical Fiber epoxy/polish connectors
- Variable temperature control (60°C to 125°C)
- Includes thermometer - Epoxy curing time starts after the oven has restabilized to the desired temperature after inserting the connectors into the curing block
- Includes cable support bracket
- Two voltage options
- See page 22-11 for curing sleeves
- Comes equipped to cure up to four duplex connectors and twelve simplex connectors at once
- Optional blocks reconfigure to eight duplex or twenty four simplex connectors

Description	Part Number
Curing Oven	110 VAC 502134-1
	220 VAC 502134-2
Adapter Block for 8 Duplex Connectors	502222-1
Adapter Block for 24 Single Connectors	502129-1
LC Oven Block Assembly	1457628-1

Inspection Microscope



- Optimal visual examination of terminated ends
- 500 µm field of view
- Dual illumination
- Coaxial for inspecting polish quality
- Oblique for general conditions
- Pre-centered, threaded adapter mount provides easy focusing and changing of connectors
- Field and laboratory examination for multimode and single-mode fibers
- Portable
- Integral infrared filter for safety
 - Do NOT use any microscope to view active fiber signals
- Disposable, Type LR44 batteries
- Long-life LED (approximately 100,000 hours of operation)
- Each Kit includes:
 - 10-power objective microscope with an impact resistant ergonomic rubber shell and high quality glass optics
 - 20-power eyepiece
 - Padded carrying case with an integrated belt loop and internal adapter storage pocket
 - Neck lanyard with safety breakaway feature
 - Universal 2.5mm ferrule adapter (for SC, ST and FC)

Description	Part Number
Inspection Microscope	1754767-1
Connector Adapters	1.25 mm Universal (LC and MU) 1754765-1
	2.5 mm Universal (SC, ST and FC) 1754766-1
	LC Duplex 2123273-1
	MT-RJ 1754768-1
	SC APC 1828833-1
	MPX 1828834-1
	MPX APC 1828835-1
	MPO 1828836-1
	MPO APC 1828837-1
	FSMA Connector Adapter 1985040-1
	FSMA Coupling Adapter (Required for FSMA Adapter) 1985041-1

DANGER: Active fibers should never be viewed through a microscope.

Polishing Bushings, Curing Sleeves, and Strip Card Kit

22



- Polishing bushings included in many tool kits
- Curing sleeves hold connectors in oven

Description	Cable Jacket Diameter (mm)	Used With	Notes	Figure	Part Number
LC Fiber Protectors, for Buffered Fiber	–	Epoxy/Polish LC Connectors			1457630-1
LC Fiber Protectors, for Jacketed Cable	–	Epoxy/Polish LC Connectors			1457630-2
Polish Bushing	3.0	Ceramic and Stainless Steel ST Connectors	Metal		503337-1
		Ceramic, Stainless Steel and Polymer Composite ST Connectors	Black Polymer	A	503304-1
		SC Connectors	Black Polymer	B	502631-1
		LC Connectors	Metal		1754074-1
Curing Sleeve	3.0	Ceramic, Stainless Steel and Polymer Composite ST Connectors	12 pieces	C	502259-1
		SC Connectors	1 piece	D	502656-1
Strip Template Kit	–	SC and ST Connectors			501818-1

PRO-CRIMPER III Fiber-Optic Hand Tool and Die Sets



- Crimp tool and die sets for LightCrimp, LightCrimp Plus, and Epoxy/Polish style connectors
- Ergonomic tool design for comfort and easy actuation
- Die sets are interchangeable in the crimp tool
- Die set 1985766-1 can be used with the fiber protective end cap in place for LightCrimp PLUS LC and SC connectors

Description	Figure	Part Number	
PRO-CRIMPER III Hand Tool (Die Sets Purchased Separately)	A	2064431-1	
For Use With	Cable Jacket Diameter (mm)	Die Set Only	Hand Tool w/Die Set
SC (Polymer Crimp Body)	3.0	503910-1	503911-1
	2.4 and 3.0	492025-1	492026-1
SC (Metal Crimp Body)	1.6 – 2.0, 2.4	1588175-1	1588176-1
	3.0	492131-1	–
LC	1.6 – 2.0, 2.4, 3.0	1588175-1	1588176-1
ST, Ceramic	3.0	58424-1	58433-4
ST, Stainless Steel	3.0	58424-1	58433-4
ST, Stainless Steel (504000-X Series Only)	3.0	58552-1	58551-1
ST Ceramic Used with Loose Tube	3.8	503890-1	–
LightCrimp PLUS LC	1.6 - 2.0	1754136-1	1754137-1
LightCrimp PLUS and LightCrimp SC	3.0	492783-1	492782-1
LightCrimp PLUS and LightCrimp ST	3.0	492622-1	492623-1
LightCrimp PLUS LC and SC, LightCrimp Splice	2.0	B 1985766-1	2064603-1

MTP/MPO IBC (In Bulkhead Cleaner)



- Dry cloth cleaner utilizes densely woven micro-fiber cloth
- Cleans male (with pins) or female MTP/MPO connectors in adapters, bulkheads, and faceplates
- Pre-washed cleaning cloth is lint and debris free
- Each cleaner is capable of more than 400 cleanings
- Protective dust cover doubles as an adapter cap for cleaning unmated connectors
- FOCIS 5-Type MTP/MPO interface compliant
- Removes dust and oil contamination

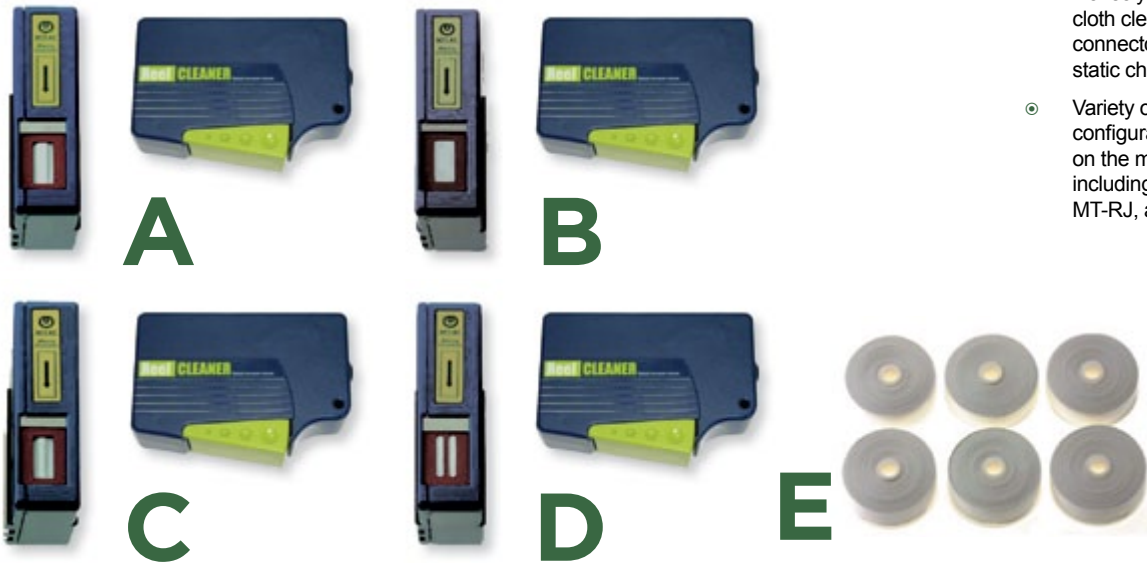
Description

MTP/MPO IBC (In Bulkhead Cleaner)

Part Number

1918809-1

OPTIPOP R Reel Optical Connector Cleaner



- Densely woven micro-fiber cloth cleans fiber optic connector tips while reducing static charge
- Variety of reel cleaner configurations allow for use on the major connector types including FC, SC, ST, LC, MT-RJ, and MPO

Description

MPO w/pins Reel Cleaner
One slot Reel Cleaner; 1.25mm, 2.5mm, MT no pins
MT-RJ plug w/pins Reel Cleaner
Two slot Reel Cleaner; 1.25mm and 2.5mm
Reel Cleaner refill (6 per pack)

Figure

A

B

C

D

E

Part Number

1918802-1

1918803-1

1918804-1

1918805-1

1918806-1

OPTIPOP C Card Optical Connector Cleaner



- Densely woven micro-fiber cloth cleans fiber optic connector tips while reducing static charge
- For use on the major connector types including FC, SC, ST, LC, MT-RJ, and MPO
- Captures debris and other contamination
- Cloth dimensions: 120mm [4.72 in] x 57mm [2.24 in]

Description

Fiber Connector Card Cleaner
Card Cleaner Refill (10 per pack)

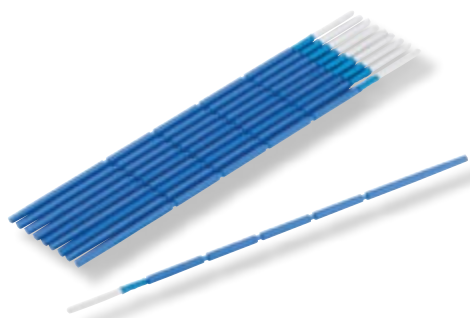
Part Number

1918810-1

1918811-1

NEOCLEAN Stick Cleaner

22



- Dry cloth stick cleaners utilize a densely woven micro-fiber cloth to clean fiber optic connector tips while reducing static charge
- Perforated handle for customizing length and angle
- Overall stick length: 151 mm [5.94 in]
- 250 Sticks per package

Description

Stick Cleaner - 2.5mm Tip Diameter
Stick Cleaner - 1.25mm Tip Diameter

Part Number

1918807-1
1918808-1

LC and SC Connector Cleaner (In Bulkhead Cleaner)



- Dry cloth cleaners specially designed to clean single fiber connectors in adapters, bulkheads, and faceplates
- Dust cap of the cleaner acts as an adapter for cleaning unmated connectors
- Extended tip reaches recessed connectors
- Removes dust and oil contamination
- Disposable cleaner with 525+ cleanings per unit

Description

LC Connector Cleaner (In Bulkhead Cleaner)
SC Connector Cleaner (In Bulkhead Cleaner)

Figure

A
B

Part Number

2064500-1
2064499-1

Professional Fiber Connector Inspection/Cleaning Kits



- Perform inspection, cleaning, maintenance, and troubleshooting on optical connectors
- Kits include, carrying case, 200x inspection microscope, visual fault locator, various styles of connector cleaners, and detailed inspection and cleaning instructions

For Use With

LC, SC, ST, FC, MT-RJ, and MPO Style Connectors
LC, SC, ST, FC, and MT-RJ Style Connectors
LC, SC, ST, and FC Style Connectors

Figure

A

Part Number

2064651-1
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2064651-3

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Tyco Electronics Corporation AMP NETCONNECT Global Offices:

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Harrisburg, PA, USA
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Fx: +1-717-986-7406

Europe

Kessel-Lo, Belgium
Ph: +32-16-352-300
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Mid East & Africa

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Ph: +33-1-3420-2122
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Latin America

Buenos Aires, Argentina
Ph: +54-11-4733-2200
Fx: +54-11-4733-2282

Asia

Hongkong, China
Ph: +852-2735-1628
Fx: +852-2735-1625

Pacific

Sydney, Australia
Ph: +61-2-9407-2600
Fx: +61-2-9407-2519

Tyco Electronics Corporation AMP NETCONNECT North American Offices:

United States

Greensboro, NC, USA
Ph: +1-800-553-0938
Fx: +1-717-986-7406

Canada

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Ph: 905-475-6222
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